

Clinical Trial Protocol

Iranian Registry of Clinical Trials

19 Jun 2026

Effects of Core Stability Training on performance, Pain and Balance in athletic patients with Chronic Ankle Sprain

Protocol summary

Summary

Ankle sprains are common injuries in athletes causing performance problems and executive ankle deficits, which have detrimental effects on athletes' activities. This study examines the impact of the core stabilization exercises on performance, pain, and balance in athletic patients with chronic ankle sprain. Athletes entered in the study had at least one sprain in ankle lateral ligaments (not in the last 6 months), and had at least once recurrence of the lesion within the last 6 months reported as a sense of chronic ankle instability, or giving way in the affected leg. In control group, 6 weeks of common physical therapy techniques (including electrotherapy and exercises such as stretching and strengthening of the weak leg muscles causing the current ankle instability) and in the intervention group, in addition to common physical therapy, we use core stability exercises. Visual analogue scale (VAS) test, dynamic balance test (stars test), foot and ankle performance measures and functional ability tests before and after the intervention will be used to compare changes in pain, balance and performance among groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2013071714035N1**

Registration date: **2014-08-23, 1393/06/01**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2014-08-23, 1393/06/01

Registrant information

Name

Mohsen Sahranavard

Name of organization / entity

Tehran Payamenoor University

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Tehran Payamenoor University

Expected recruitment start date

2013-06-22, 1392/04/01

Expected recruitment end date

2014-03-06, 1392/12/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effects of Core Stability Training on performance, Pain and Balance in athletic patients with Chronic Ankle Sprain

Public title

Effects of Core Stability Training on performance, Pain and Balance in athletic patients with Chronic Ankle Sprain

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria : 1) having at least one lateral ankle ligament sprain clear the extent to which a person is not able to bear weight on it and was forced to use crutches

(not to mention at 6 months); 2) having experienced at least one recurrence , or feel chronic ankle instability and ankle affected by the recent 6 months free; 3) no history of heart disease - cardiovascular disease, neurological surgery in the lower extremities and lower back in two years previous ; 4) failure to lower the risk of injury that may lead to limited physical activity; 5) Not having uncorrected visual disturbances , dizziness, metabolic diseases, neurological, anatomical malformation, rheumatoid arthritis, drug and alcohol; I 6) Failure to participate in the abs workout program (until the 6 - month intervention). Exclusion criteria : 1) a desire to withdraw from the study at each stage of treatment; 2) an increase in patient complaints such as pain.

Age

From **20 years** old to **40 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **30**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Single blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Tehran payamenoor university

Street address

Vila Str, Taleghani avenue, Payame Noor University, Tehran, Iran

City

Tehran

Postal code

Approval date

2013-06-10, 1392/03/20

Ethics committee reference number

7492//1002/>

Health conditions studied

1

Description of health condition studied

Chronic Ankle Sprain

ICD-10 code

S93.4

ICD-10 code description

Sprain and Strain of Ankle

Primary outcomes

1

Description

Pain

Timepoint

Befor and after of intervention

Method of measurement

Visual Analogue Scale

Secondary outcomes

1

Description

Balance and function

Timepoint

Befor and after of intervention

Method of measurement

Stare test, Foot and Ankle Ability Measure (FAAM), Functional performance test

Intervention groups

1

Description

control group: 6weeks usual physiotherapy (electrotherapy:TENS,US,HP,stretching and strengthening exercises)

Category

Rehabilitation

2

Description

Intervention group: 6weeks core stability exercises(1) Pron leg lifts(single leg lift);2) Pron leg lifts(single-bent-knee lift);3) Criss Cross;4) Double straight-leg stretch(lower lift); 5) Hundred;6) Long lever body position setup;7) Sid bridge; 8) 900 bent-knee rotation) and usual physiotherapy(electrotherapy:TENS,US,HP,stretching and strengthening exercises). Duration of these exercises for 30 minutes per treatment session will be divided into three sets of 10.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Tehran Payamenoor University

Full name of responsible person

Mohsen Sahranavard

Street address

Physiotherapy Clinic, Qaem day clinic, Janbazan Str,
Bushehr, Iran

City

Bushehr

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Tehran payamenoor university

Full name of responsible person

Dr. Aghayari

Street address

Vila Str, Taleghani avenue, Payame Noor University,
Tehran, Iran

City

Tehran

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Tehran payamenoor university

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

Tehran Payamenoor University

Full name of responsible person

Mohsen Sahranavard

Position

Master Student in Sport Sciences

Other areas of specialty/work

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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