

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 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)

##### Phone

+98 77 1458 3646

##### Email address

sahranavard\_mohsen@yahoo.com

##### 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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**Email**

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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*