

Clinical Trial Protocol

Iranian Registry of Clinical Trials

20 Jun 2026

to compare the effect of trunk core stability training and TRX on the performance, balance and strength of athletes with ankle sprain

Protocol summary

Study aim

The purpose of the present study was to compare the effect of Core Stabilization Exercises and TRX on the performance, strength and balance of athletes with ankle sprain

Design

Clinical trials with control group, with parallel groups, randomized

Settings and conduct

The subjects of the training groups did exercises for 8 weeks and 3 sessions per week recording each protocol. During the 8 weeks, the control group did not do any activity. Evaluation of variables was done 48 hours before and after. Functional status assessment was performed by functional tests. The mutation test was executed in a 5-foot-long, five-meter-long path, marked with two cones. Each subject performed the test twice and then the best record was recorded. In order to evaluate the dynamic balance, Y balance test and the Stack test was used to evaluate the static balance.

Participants/Inclusion and exclusion criteria

Entry requirements : ankle sprain which causes pain or lagging for more than one day feeling of weakness pain, or chronic instability that attributed to early sprain and the experience of wiping out 6 months before the start of the study. Exit criteria: ankle fracture and bilateral ankle sprain as well as a history of knee ACL injury

Intervention groups

Different groups of research included each group of 10 people Group 1: Stabilization Exercises Group 2: TRX training Group 3: combined exercises (central stability + TRX) Group 4: controls

Main outcome variables

Lateral mutation test , Y balance test, Stack TEST

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20170510033909N4**

Registration date: **2019-07-06, 1398/04/15**

Registration timing: **retrospective**

Last update: **2019-07-06, 1398/04/15**

Update count: **0**

Registration date

2019-07-06, 1398/04/15

Registrant information

Name

فرزانه تقيان

Name of organization / entity

دانشگاه آزاد اسلامی. واحد اصفهان

Country

Iran (Islamic Republic of)

Phone

+98 913 308 0241

Email address

f.taghian@khuisf.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2018-06-22, 1397/04/01

Expected recruitment end date

2018-07-21, 1397/04/30

Actual recruitment start date

2018-08-06, 1397/05/15

Actual recruitment end date

2018-08-06, 1397/05/15

Trial completion date

2018-10-23, 1397/08/01

Scientific title

to compare the effect of trunk core stability training and TRX on the performance, balance and strength of athletes with ankle sprain

Public title

to compare the effect of trunk core stability training and TRX on the performance, balance and strength of athletes

Purpose

Other

Inclusion/Exclusion criteria**Inclusion criteria:**

Inclusion criteria to enter the study A history of an ankle sprain that leads to pain or lagging for more than a day feeling of weakness pain, or chronic instability attributed to the early sprain the experience of wiping out 6 months before the start of the study

Exclusion criteria:

Exit criteria in this study were ankle fracture bilateral ankle sprain and also a history of knee ACL injury

Age

From **19 years** old to **26 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **40**

Actual sample size reached: **40**

Randomization (investigator's opinion)

Randomized

Randomization description

Randomization is based on a single sequence of random assignments that is called simple randomization. The Roll of a die method is used for three group studies. The numbers 1 and 2 for the first group were numbers 3 and 4 for the second group and the numbers 5 and 6 for the third group.

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**

Ethics committee of khorasgan University

Street address

No.3 Baharan ave.Ostad shahriar jonobi st .Robot

City

isfahan

Province

Isfahan

Postal code

81838-95153

Approval date

2018-06-03, 1397/03/13

Ethics committee reference number

lr.iau.khuisf.rec.1397.018

Health conditions studied**1****Description of health condition studied**

Ankle sprain

ICD-10 code

S93

ICD-10 code description

Dislocation and sprain of joints and ligaments at ankle, foot and toe level

Primary outcomes**1****Description**

Performance, Static Balance, Dynamic Balance

Timepoint

At the beginning of the study, eight weeks after the implementation of the sports protocols

Method of measurement

Function: Mutation test. Static mode: Stroke. Dynamic balance y

Secondary outcomes

empty

Intervention groups**1****Description**

Intervention group 1: Core Stabilization Exercises

Category

Rehabilitation

2**Description**

Intervention Group 2: TRX exercises

Category

Rehabilitation

3**Description**

Control group: Routine care

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Doctor Mohammad Saleki's Office

Full name of responsible person

Mohamad Saleki

Street address

Building Azhand , Hakim Nezami Ave,Daghighi St

City

Isfahan

Postal code

8111111141

Phone**Fax****Email**

F_taghian@yahoo.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Khorasgan branch ,Islamic Azad university

Full name of responsible person

Majid Toghyani

Street address

Khorasgan University ,Arghavanie St, Esfahan

City

Isfahan

Province

Isfahan

Postal code

81551-39998

Phone

+98 31 3500 2352

Email

Toghiani@Hotmail.COM

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

Yes

Title of funding source

Khorasgan branch ,Islamic Azad university

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin**Type of organization providing the funding**

Academic

Person responsible for general inquiries

Contact**Name of organization / entity**

The University of Khorasgan Isfahan

Full name of responsible person

Farzaneh Taghian

Position

Associate Professor

Latest degree

Ph.D.

Other areas of specialty/work

Sport Medicine

Street address

NO3.Baharan Ave,Ostad Shahriar St, Robot St.

City

Isfahan

Province

Isfahan

Postal code

81551-39998

Phone

+98 31 3500 2352

Email

F_taghian@yahoo.com

Person responsible for scientific inquiries

Contact**Name of organization / entity**

The University of Khorasgan Isfahan

Full name of responsible person

Farzaneh Taghian

Position

Associate Professor

Latest degree

Ph.D.

Other areas of specialty/work

Sport Medicine

Street address

Khorasgan University .Arghavanie St. Isfahan

City

Isfahan

Province

Isfahan

Postal code

81551-39998

Phone

+98 31 3454 2315

Email

F_taghian@yahoo.com

Person responsible for updating data

Contact**Name of organization / entity**

Islamic Azad University

Full name of responsible person

Farzaneh Taghian

Position

Associate Professor

Latest degree

Ph.D.

Other areas of specialty/work

Sport Medicine

Street address

NO3.Baharan Ave,Ostad Shahriar St, Robat St.

City

Isfahan

Province

Isfahan

Postal code

81838-95153

Phone

+98 31 3454 2315

Email

F_taghian@yahoo.com

Sharing plan**Deidentified Individual Participant Data Set (IPD)**

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

No more info

Study Protocol

No - There is not a plan to make this available

Statistical Analysis Plan

No - There is not a plan to make this available

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

No - There is not a plan to make this available

Analytic Code

No - There is not a plan to make this available

Data Dictionary

No - There is not a plan to make this available