# Clinical Trial Protocol
# Iranian Registry of Clinical Trials

22 Nov 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 تقیان

**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 .Robat
**City**
isfahan
**Province**
Isfehan
**Postal code**
81838-95153
**Approval date**
2018-06-03, 1397/03/13
**Ethics committee reference number**
Ir.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
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Isfahan
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8111111141
**Phone**
**Fax**
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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
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81551-39998
**Phone**
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**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
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## Person responsible for scientific inquiries

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## Person responsible for updating data

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## 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