

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

22 Jun 2026

### The effect of dual task training on dynamic postural control in subjects with functional ankle instability

#### Protocol summary

##### Summary

The aim of this study was to investigate the effects of the dual task training and balance training on balance indices in subjects with functional ankle instability. This randomized clinical trial was performed in Zahedan University of medical sciences, in 2015-2016. 32 Subjects with functional ankle instability were selected through non-probability sampling method. The subjects were selected based on following inclusion criteria: Functional ankle instability with at least one ankle sprain in the last year and feeling the giving way, The absence of mechanical instability of ankle by performing the anterior drawer test and talar tilt test, history of dizziness and fainting, Pain or swelling in the ankle, Impaired vision or hearing or speech, hip and lower extremity musculoskeletal disorders, feeling any pain and discomfort in the body and age between 18 to 52 years. Exclusion criteria included: The reluctance of patients to continue treatment, worsening of symptoms during the study, another treatment during investigation, given the patient's lack of progress in the early stages of attention training. The subjects were randomly allocated to two groups: dual task training group and biodex balance training group. Each of the two groups received their interventions for 4 weeks and 3 sessions per week. Before and after the period of the interventions, overall, anteroposterior and mediolateral stability indices were measured through the postural stability test of biodex balance system.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT201604251675N13**

Registration date: **2017-01-24, 1395/11/05**

Registration timing: **retrospective**

Last update:

Update count: **0**

##### Registration date

2017-01-24, 1395/11/05

##### Registrant information

###### Name

Asghar Akbari

###### Name of organization / entity

Zahedan University of Medical Sciences

###### Country

Iran (Islamic Republic of)

###### Phone

+98 54 1322 8445

###### Email address

akbaria@zdmu.ac.ir

##### Recruitment status

###### Recruitment complete

##### Funding source

Vice Chancellor for Research of Zahedan University of Medical Sciences

##### Expected recruitment start date

2015-12-22, 1394/10/01

##### Expected recruitment end date

2016-06-06, 1395/03/17

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

The effect of dual task training on dynamic postural control in subjects with functional ankle instability

##### Public title

The effect of dual task training on postural control

##### Purpose

Treatment

## Inclusion/Exclusion criteria

Inclusion criteria: Age between 18 and 52; functional ankle instability with at least one ankle sprain in the last year and feeling the giving way; the absence of mechanical instability of ankle by performing the anterior drawer test and talar tilt test; no history of dizziness and fainting; pathological forgetfulness; pain or swelling in the ankle; hip and lower extremity musculoskeletal disorders; history of spinal trauma in the last six months; feeling any pain and discomfort in the body; history of pain and swelling in the body symmetrically; taking painkillers; sedatives and alcohol 48 hours before the test; history of head injury; impaired vision or hearing, or speech. Exclusion criteria: The reluctance of patients to continue treatment; worsening of symptoms during the study; another treatment during investigation; given the patient's lack of progress in the early stages of attention training.

### Age

From **18 years** old to **52 years** old

### Gender

Both

### Phase

N/A

### Groups that have been masked

*No information*

### Sample size

Target sample size: **32**

### Randomization (investigator's opinion)

Randomized

### Randomization description

### Blinding (investigator's opinion)

Not blinded

### Blinding description

### Placebo

Not used

### Assignment

Parallel

### Other design features

Randomization: Subjects were randomly assigned into two groups by random draw.

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Ethics Committee of Zahedan University of Medical Sciences

##### Street address

Deputy of Research, Zahedan University of Medical Sciences, Jannat Blvd., Dr. Hesabi Sq. Zahedan

##### City

Zahedan

##### Postal code

9816843463

### Approval date

2016-02-16, 1394/11/27

### Ethics committee reference number

ir.zaums.rec.1394.375

## Health conditions studied

### 1

#### Description of health condition studied

functional ankle instability

#### ICD-10 code

S93.4

#### ICD-10 code description

Sprain and Strain of Ankle

## Primary outcomes

### 1

#### Description

Overall stability index

#### Timepoint

Before and after the period of the interventions

#### Method of measurement

Biodex balance system

### 2

#### Description

Mediolateral stability index

#### Timepoint

Before and after the period of the interventions

#### Method of measurement

Biodex balance system

### 3

#### Description

Anteroposterior stability index

#### Timepoint

Before and after the period of the interventions

#### Method of measurement

Biodex balance system

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

Balance training group: The first group received twelve training sessions during 4 consecutive weeks, three times per week, 30 minutes per session including postural stability training with biodex balance system.

#### Category

Rehabilitation

## 2

### Description

Dual task training group: The second group received twelve training sessions during 4 consecutive weeks, three times per week, 30 minutes per session including dual task training with biodex balance system and attention process training.

### Category

Rehabilitation

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Razmejo-Moghadam Physiotherapy Clinic

##### Full name of responsible person

Dr. Asghar Akbari

##### Street address

Dept. of Physiotherapy, School of Rehabilitation Sciences, Razmejo-Moghadam Laboratory, Ayatoallah Kafami St.

##### City

zahedan

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Vice Chancellor for Research, Zahedan University of Medical Sciences

##### Full name of responsible person

Dr. Hoshang rafigdst

##### Street address

Deputy of Research, Zahedan University of Medical Sciences, Jannat Blvd., Dr. Hesabi Sq.

##### City

Zahedan

#### 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, Zahedan University of Medical Sciences

#### 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

Zahedan University of Medical Sciences

#### Full name of responsible person

Dr. Asghar Akbari

#### Position

Ph.D in Physiotherapy

#### Other areas of specialty/work

#### Street address

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## Person responsible for scientific inquiries

### Contact

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#### Position

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#### Other areas of specialty/work

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## Person responsible for updating data

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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*