

Clinical Trial Protocol

Iranian Registry of Clinical Trials

16 Sep 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 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

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+98 54 1322 8445

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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 rafigdest

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

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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

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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