

Clinical Trial Protocol

Iranian Registry of Clinical Trials

04 Jul 2026

The effect of eight-weeks corrective intervention on balance, proprioception and plantar pressure variables in woman with limited ankle dorsiflexion

Protocol summary

Study aim

The purpose of this study is to determine the effect of eight-weeks corrective intervention on balance, proprioception and plantar pressure variables in woman with limited ankle dorsiflexion

Design

Clinical trial with control group, with parallel groups, single blinded, randomized

Settings and conduct

The tests will be carried out by the specialists at the Sport Rehabilitation Laboratory of Bu-Ali Sina University in Hamadan, and then interventions and exercises will take place in the gym. During the testing, the participant will be unaware of the main purpose of the research. outcome assessors and data analyzes do their job assuming all participants receive training. Intervention group: Stretching Exercises, Exercises will be 3 sessions of 45 minutes per week for 8 weeks. Control group: No Intervention

Participants/Inclusion and exclusion criteria

Having an active dorsiflexion angle of less than 20 degrees in sitting position, having at least 3 training sessions per week, having normal BMI (15-25) History of any injury in the past six months, history of lower extremity surgery, ankle ligament injury

Intervention groups

Intervention group: Stretching Exercises, Exercises will be 3 sessions of 45 minutes per week for 8 weeks. Control group: No Intervention

Main outcome variables

Disorder in Plantar pressure distribution, ankle sprain, lower extremity injury

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20200315046781N1**

Registration date: **2021-02-21, 1399/12/03**

Registration timing: **prospective**

Last update: **2021-02-21, 1399/12/03**

Update count: **0**

Registration date

2021-02-21, 1399/12/03

Registrant information

Name

Mahdieh Zareei

Name of organization / entity

Bu Ali Sina University

Country

Iran (Islamic Republic of)

Phone

+98 81 3838 1423

Email address

m.zareie@phe.basu.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-04-09, 1400/01/20

Expected recruitment end date

2021-06-22, 1400/04/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of eight-weeks corrective intervention on

balance, proprioception and plantar pressure variables in woman with limited ankle dorsiflexion

Public title

The effect of eight-weeks corrective intervention on balance, proprioception and plantar pressure variables

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Having an active dorsiflexion angle of less than 20 degrees in sitting position Having at least three training sessions per week

Exclusion criteria:

History of any injury in the past six months History of lower extremity surgery

Age

From **15 years** old to **26 years** old

Gender

Female

Phase

N/A

Groups that have been masked

- Participant
- Outcome assessor
- Data analyser

Sample size

Target sample size: **26**

Randomization (investigator's opinion)

Randomized

Randomization description

Random Number Generator software is randomized and then assigned to double groups based on SNOSE allocation hiding

Blinding (investigator's opinion)

Single blinded

Blinding description

Participants, outcome assessors and data analyzes do their job assuming all participants receive training

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Hamedan University of Medical Sciences

Street address

Bu Ali Sina University, Abu Taleb St, Modares Quarter, Hamedan

City

Hamedan

Province

Hamadan

Postal code

3869565178

Approval date

2020-02-26, 1398/12/07

Ethics committee reference number

IR.BASU.REC.1398.056

Health conditions studied

1

Description of health condition studied

Limited ankle dorsiflexion

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Plantar pressure variables

Timepoint

Before the intervention begins, One day after the end of the intervention

Method of measurement

RSscan Device

2

Description

Balance

Timepoint

Before the intervention begins, One day after the end of the intervention

Method of measurement

Y-Balance Test

3

Description

Proprioception

Timepoint

Before the intervention begins, One day after the end of the intervention

Method of measurement

goniometer

Secondary outcomes

1

Description

Disorder in Plantar pressure Distribution

Timepoint

Before the intervention begins, One day after the end of the intervention

Method of measurement

RSscan Device

2

Description

imbalance

Timepoint

Before the intervention begins, One day after the end of the intervention

Method of measurement

Y-Balance Test

3

Description

disorder in Proprioception

Timepoint

Before the intervention begins, One day after the end of the intervention

Method of measurement

goniometer

Intervention groups

1

Description

Intervention group: Corrective Exercises will last for 8 weeks and 3 sessions per week .Equipment such as step and strap will be used for the exercises.

Category

Rehabilitation

2

Description

Control group: No Intervention

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Committee of volleyball and basketball of Hamedan

Full name of responsible person

Mahdieh Zareei

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m.zareie@phe.basu.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Bu Ali Sina University

Full name of responsible person

Farzaneh saki

Street address

Bu Ali Sina University, Abu Taleb St, Modares Quarter, Hamedan

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F_saki@basu.ac.ir

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Bu Ali Sina 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

Bu Ali Sina University

Full name of responsible person

Mahdieh Zareei

Position

Student

Latest degree

Bachelor

Other areas of specialty/work

Sport Rehabilitation

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Person responsible for scientific inquiries

Contact

Name of organization / entity

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Full name of responsible person

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Person responsible for updating data

Contact

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Undecided - It is not yet known if there will be a plan to make this available

Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan

Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form

Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available