

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

The effect of adding an individual myofascial release program to therapeutic exercises on foot posture, proprioception, range of motion, strength, and function in women with excessive foot pronation.

Protocol summary

Study aim

Determining the effect of adding individual myofascial release to therapeutic exercises on proprioception, range of motion, strength, and function in women with excessive foot pronation.

Design

A controlled, parallel-group, single-blind, randomized, phase-free clinical trial of 36 patients. A web-based program was used for randomization.

Settings and conduct

This study will be conducted in Sari, Mazandaran, and pre- and post-study tests were conducted in a physiotherapy clinic and corrective exercise center. The data analyst was blinded. Muscle strength, proprioception, and range of motion tests were measured with a hand-held dynamometer, goniometer, and goniometer, respectively.

Participants/Inclusion and exclusion criteria

Inclusion criteria: 1) Having excessive foot pronation based on the Foot Condition Index criteria 2) Being female 3) Age between 18 and 30 years 4) Completing the voluntary participation consent form Inclusion criteria 1) Being under treatment 2) Any injury or abnormality affecting the research process 3) Fracture or surgery in the lower limb 4) Being under treatment for another exercise program

Intervention groups

This study includes 2 exercise groups and a control group, with exercise group 1 performing strength exercises with stretching in the soles of the feet and lumbar region alone, and group 2 performing myofascial release exercises performed by the individual themselves. The control group does not receive any intervention.

Main outcome variables

Proprioception, Rangs of motion, Muscle strength, Performance

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20250223064827N1**

Registration date: **2025-07-16, 1404/04/25**

Registration timing: **prospective**

Last update: **2025-07-16, 1404/04/25**

Update count: **0**

Registration date

2025-07-16, 1404/04/25

Registrant information

Name

Alireza Abbasi

Name of organization / entity

The university Kharazmi

Country

Iran (Islamic Republic of)

Phone

+98 86 3622 5795

Email address

abbasialireza156@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2025-07-23, 1404/05/01

Expected recruitment end date

2025-07-27, 1404/05/05

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of adding an individual myofascial release program to therapeutic exercises on foot posture, proprioception, range of motion, strength, and function in women with excessive foot pronation.

Public title

The effect of adding an individual myofascial release program to therapeutic exercises on foot posture, proprioception, range of motion, strength, and function in women with excessive foot pronation.

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Having excessive foot pronation based on the Foot Posture Index criteria Being female Age between 18 and 30 years old

Exclusion criteria:

Being under treatment Using medical insoles Having had previous surgery Any training program receipt Any injury or abnormality affecting the research process, with the exception of excessive pronation History of ankle sprains Fracture or surgery to the lower extremities, spine, or pelvis in the past year Any damage or abnormality affecting the research

Age

From **18 years** old to **30 years** old

Gender

Female

Phase

N/A

Groups that have been masked

- Data analyser

Sample size

Target sample size: **36**

Randomization (investigator's opinion)

Randomized

Randomization description

This study uses a simple randomization method using a block randomization method. The study will be assigned to 2 intervention groups and 1 control group using a web-based program (randomizer.org). A member of the research team who will not be involved in this part will be asked to perform the random allocation sequence of the samples using a computer program. Sealed envelopes with the random sequence will be used to conceal the allocation.

Blinding (investigator's opinion)

Single blinded

Blinding description

In this study, the person responsible for analyzing the data is unaware of the individuals and groupings and only analyzes the results and statistical data in the two tests taken.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Khaeeazmi University

Street address

Kharazmi University, Shahid Beheshti St., Karaj, Iran

City

Karaj

Province

Alborz

Postal code

۳۷۵۵۱- ۳۱۹۷۹

Approval date

2025-02-12, 1403/11/24

Ethics committee reference number

IR.KHU.REC.1403.188

Health conditions studied

1

Description of health condition studied

Pronation of the foot

ICD-10 code

M21.6

ICD-10 code description

Other acquired deformities of foot

Primary outcomes

1

Description

Muscular strength

Timepoint

Beginning and end of exercises

Method of measurement

Hand-held dynamometer

2

Description

Rangs of motion

Timepoint

Beginning and end of exercises

Method of measurement

Universal goniometer

3

Description

Proprioception

Timepoint

Beginning and end of exercises

Method of measurement

Universal goniometer

4

Description

Performance

Timepoint

Beginning and end of exercises

Method of measurement

Three-step jump and six-meter timed jump tests

5

Description

Foot position

Timepoint

Beginning and end of exercises

Method of measurement

Plantar indicators

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: This group will do strength training with elastic bands and will also do functional exercises such as walking.

Category

Rehabilitation

2

Description

Intervention group: Intervention group: In addition to the exercises, this group performs a type of myofascial release by the individual.

Category

Rehabilitation

3

Description

Control group: They receive no intervention.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Sargol Clinic

Full name of responsible person

Tanya Naghash

Street address

Next to Tejarat Bank, Emam Square

City

Sari

Province

Mazandaran

Postal code

۳۷۵۵۱- ۳۱۹۷۹

Phone

+98 11 3360 6570

Email

taniyanaghash@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Kharazmi University

Full name of responsible person

Dr. Alireza Harifi Maud

Street address

Kharazmi University, Shahid Beheshti St., Karaj

City

Karaj

Province

Alborz

Postal code

۳۷۵۵۱- ۳۱۹۷۹

Phone

+98 21 2222 8001

Email

info@khu.ac.ir

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Kharazmi 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 Kharazmi

Full name of responsible person

Alireza Abbasi

Position

Student

Latest degree

Master

Other areas of specialty/work

Rehabilitation management

Street address

Kharazmi University, Shahid Beheshti St., Karaj

City

Karaj

Province

Alborz

Postal code

3951986986

Phone

+98 86 3622 5795

Fax

Email

abbasialireza156@gmail.com

Other areas of specialty/work

Rehabilitation management

Street address

Kharazmi University, Shahid Beheshti St., Karaj, Iran

City

Karaj

Province

Alborz

Postal code

3951986986

Phone

+98 86 3622 5795

Fax

Email

abbasialireza156@gmail.com

Person responsible for scientific inquiries

Contact

Name of organization / entity

The University of Kharazmi

Full name of responsible person

Seyed Sadroddin Shojaodin

Position

Professor

Latest degree

Ph.D.

Other areas of specialty/work

Rehabilitation management

Street address

Kharazmi University, Shahid Beheshti St., Karaj

City

karaj

Province

Alborz

Postal code

۳۷۵۵۱- ۳۱۹۷۹

Phone

+98 26 3457 9600

Email

shojaeddin@khu.ac.ir

Person responsible for updating data

Contact

Name of organization / entity

The university Kharazmi

Full name of responsible person

Alireza Abbasi

Position

Student

Latest degree

Master

Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

No - There is not a plan to make this available

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is 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

Title and more details about the data/document

Personal data of individuals is a personal matter and is published if the individuals give their permission, and remains confidential if the individuals do not give their permission to publish this data.

When the data will become available and for how long

Access begins 6 months after results are published.

To whom data/document is available

Academic researchers and those engaged in research and investigation in this field.

Under which criteria data/document could be used

The data from this study will be made available to researchers for all review and meta-analysis studies.

From where data/document is obtainable

To the email address: abbasialireza155@gmail.com

What processes are involved for a request to access data/document

The applicant will receive the data via email to the specified address within 10 to 15 days.

Comments