Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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
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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 Khaeazmi University

Street address
Kharazmi University, Shahid Beheshti St., Karaj, Iran

City
Karaj

Province
Alborz

Postal code
۳۱۹۷۹- ۳۷۵۵۱

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
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Next to Tejarat Bank, Emam Square
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
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Full name of responsible person
Dr. Alireza Harifi Maud
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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
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

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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