Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

Effect of functional fatigue on ground reaction force among individuals with flat feet

Protocol summary

Summary

The purpose of this study is to determine the effect of functional fatigue in flat feet and normal feet subjects. This study is not randomized and not blinded. 32 subjects (16 normal feet and 16 bilateral flexible flat feet) without any visual malalignment in lower extremity and lumbosacral area will complete three trials of barefoot walking across the force plates before fatigue. These three trials will be repeated after warm-up and doing functional fatigue protocol for each subject. Different components of ground reaction force will be analyzed.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138905114441N3**
Registration date: **2010-09-23, 1389/07/01**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2010-09-23, 1389/07/01

Registrant information

Name

Hassan Jafari

Name of organization / entity

Faculty of Rehabilitation Sciences, Iran University of Medical Sciences

Country

Iran (Islamic Republic of)

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+98 912139131382

Email address

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Recruitment status

Recruitment complete

Funding source

Iran University of Medical Sciences

Expected recruitment start date

2010-06-15, 1389/03/25

Expected recruitment end date

2010-08-15, 1389/05/24

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of functional fatigue on ground reaction force among individuals with flat feet

Public title

Fatigue effect on ground reaction force in Flatfoot Patients

Purpose

Other

Inclusion/Exclusion criteria

Inclusion criteria: Age between 18-40, Bilateral flexible flat foot Exclusion criteria: any visual sign of lower limb or lumbosacral malalignment, a limb length discrepancy greater than 1 cm, a history of lower extremity or lumbosacral injury during 6 months prior to the study, history of foot and ankle surgery, neurological and or musculoskeletal disorder suffering from pain during the test

Age

From **18 years** old to **40 years** old

Gender

Female

Phase

1

Groups that have been masked

No information

Sample size

Target sample size: **16**

Randomization (investigator's opinion)

Not randomized

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Rehabilitation Sciences Faculty (IUMS) Ethics Committee

Street address

Faculty of Rehabilitation Sciences, Shahnazari St, Madar Ave, Mirdamad Blvd

City

Tehran

Postal code

1545913187

Approval date

2010-06-20, 1389/03/30

Ethics committee reference number

244

Health conditions studied

1

Description of health condition studied

Flexible Flat Foot

ICD-10 code

Q66.5

ICD-10 code description

Congenital pes planus

Primary outcomes

1

Description

1st and 2nd peak and the minimum value of vertical ground reaction force

Timepoint

Before and after functional fatigue protocol

Method of measurement

Force plate

Secondary outcomes

empty

Intervention groups

1

Description

Fatigue Protocol: 5 sets of serial hops with the metronome rate of 108 bpm.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Faculty of Rehabilitation Sciences, Iran University of Medical Sciences

Full name of responsible person

Sahar Boozari

Street address

Faculty of Rehabilitation Sciences, Shahnazari St, Madar Ave, Mirdamad Blvd

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice-Chancellor for Resaech, Iran University of Medical Sciences

Full name of responsible person

Dr Maziar Moradi Lakeh

Street address

Iran University of Medical Sciences, Hemmat highway

City

Tehran

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Vice-Chancellor for Resaech, Iran 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
Faculty of Rehabilitation Sciences, Iran University of Medical Sciences

Full name of responsible person
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PHD of 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