

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Effect of leg muscles exercise on clinical improvement of knee osteoarthritis

Protocol summary

Tabriz University of medical sciences

Summary

Adding calf muscles physical therapy to the ordinary physiotherapy, can improve functional state of patients with knee osteoarthritis. Sixty patients are set in two intervention and control groups randomly. In intervention group we will add calf muscles strengthening and stretching exercises on knee physiotherapy during 20 sessions. Before and after program, functional tests as WOMAC, Lequesne questionnaire and falling risk with balance system would be tested to compare groups.

Expected recruitment start date

2009-11-22, 1388/09/01

Expected recruitment end date

2010-01-21, 1388/11/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

General information

Scientific title

Effect of leg muscles exercise on clinical improvement of knee osteoarthritis

Acronym

IRCT registration information

IRCT registration number: **IRCT138808132664N1**

Registration date: **2009-12-18, 1388/09/27**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2009-12-18, 1388/09/27

Public title

Effect of leg muscles exercise on clinical improvement of knee osteoarthritis

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: moderate knee osteoarthritis Exclusion criteria: severe systemic illness, joint injection, surgery or physical therapy within last six months

Age

From **40 years** old to **80 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **60**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Registrant information

Name

Yaghoub Salekzamani

Name of organization / entity

Tabriz University of medical sciences

Country

Iran (Islamic Republic of)

Phone

+98 41 1337 3967

Email address

salekzamaniy@tbzmed.ac.ir

Recruitment status

Recruitment complete

Funding source

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Tabriz University of medical sciences

Street address

Imam Reza Hospital

City

Tabriz

Postal code

Approval date

2009-04-01, 1388/01/12

Ethics committee reference number

173/4/5

Health conditions studied

1

Description of health condition studied

knee osteoarthritis

ICD-10 code

M19

ICD-10 code description

Other arthrosis

Primary outcomes

1

Description

Functional improvment

Timepoint

Before and after 20 sessions of physiotherapy

Method of measurement

WOMAC & Lequesne Questionnaires

Secondary outcomes

1

Description

Falling Risk

Timepoint

Before and after 20 sessions of physiotherapy

Method of measurement

Biodex Balance system

Intervention groups

1

Description

Control group: only routine physiotherapy

Category

Rehabilitation

2

Description

Intervention group: routine physiotherapy and calf muscles strengthening and stretching excercises

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Tabriz Imam Reza Hospital

Full name of responsible person

Yaghoub Salekzamani

Street address

Golgasht st.

City

Tabriz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Research vice-chancellor of Tabriz univercity of medical sciences

Full name of responsible person

Mir Ali Eteraf Oskouee

Street address

Tabriz univercity of medical sciences

City

Tabriz

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Research vice-chancellor of Tabriz univercity 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

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Email

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Web page address

Person responsible for general inquiries

Contact

Name of organization / entity

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Full name of responsible person

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Assistant professor

Other areas of specialty/work

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Person responsible for updating data

Contact

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Full name of responsible person

Babak Kolahi

Position

Resident

Other areas of specialty/work

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Person responsible for scientific inquiries

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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