

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

The Effect of Tai Chi exercises on postural stability and control in old people with knee osteoarthritis

Protocol summary

Tehran University of Medical Sciences- Vice Chancellor for Education

Summary

The aim of this study is to determine the effect of Tai Chi exercises on postural stability and control in old patients with knee osteoarthritis. Patients with knee osteoarthritis (Kellgren-lawrence \geq 2); with age higher than 60 years old and with BMI less than 40 kg/m² included in study. 14 females and 6 males with knee osteoarthritis voluntarily participate in this study. These voluntaries are trained with Tai Chi twice a week for 8 weeks. Each session last 60 minutes. Areas and Mean velocities are measured by Force plate in standing position before and after Tai Chi.

Expected recruitment start date

2013-07-18, 1392/04/27

Expected recruitment end date

2013-12-17, 1392/09/26

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201206191722N8**

Registration date: **2013-09-12, 1392/06/21**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2013-09-12, 1392/06/21

Registrant information

Name

Samira Karimpour

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 21 7753 3939

Email address

hadianrs@sina.tums.ac.ir

Recruitment status

Recruitment complete

Funding source

Scientific title

The Effect of Tai Chi exercises on postural stability and control in old people with knee osteoarthritis

Public title

The Effect of Tai Chi on balance in old people with knee osteoarthritis

Purpose

Health service research

Inclusion/Exclusion criteria

Inclusion criteria: age above 60 years old; with BMI less than 40 kg/m²; with knee osteoarthritis; Kellgren-lawrence \geq 2 ; VAS 3-4; Mini-Mental Examination $>$ 24; Berg $>$ 41; WOMAC $<$ 60; with ability to stand independently for higher than one minute on feet to achieve parameters of force plate. Exclusion criteria: with history of seizure, dizziness, diabetes, Parkinson disease and other diseases that can cause disturbance in balance; with history of Tai Chi or other exercises like yoga; with history of intra- joint steroid injection for the past 6 months; with past history of knee surgery or fracture of knee; treatment with physiotherapy in time of study ;with past history of heart disease; with anxiety questioner(Beck) $>$ 12.

Age

From **60 years** old to **78 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: 20

Randomization (investigator's opinion)

N/A

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Single

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethical committee of Tehran University of Medical sciences

Street address

Floor 6-TUMS central Bulding-Gods St.Keshavarz Bouevard

City

Tehran

Postal code

Approval date

2013-07-17, 1392/04/26

Ethics committee reference number

130/714/92/3

Health conditions studied

1

Description of health condition studied

Knee osteoarthritis

ICD-10 code

M17.1

ICD-10 code description

Primary gonarthrosis(arthrosis of knee): NOS

Primary outcomes

1

Description

Areas and Mean velocity

Timepoint

before and after intervention

Method of measurement

Force plate

Secondary outcomes

1

Description

postural stability and control

Timepoint

before and after intervention

Method of measurement

Force plate

Intervention groups

1

Description

60 minutes Tai Chi sessions (twice a week for 8 weeks).

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Yas rehabilitation center

Full name of responsible person

Elham Ghandali

Street address

sattarkhan,Bargh alestom,nirogah bargh

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

postgraduate Studied and Research Program, Tehran University of Medical Sciences

Full name of responsible person

Dr. Mohammad Jalili

Street address

The Seventh Floor- Main Building Tehran University of Medical Sciences-Ghods Str-Keshavarz Boulevard

City

Tehran

Grant name

Grant code / Reference number

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

Yes

Title of funding source

postgraduate Studied and Research Program, Tehran 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

Rehabilitation faculty, Tehran University of Medical Sciences

Full name of responsible person

Elham ghandali

Position

Msc student

Other areas of specialty/work

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Person responsible for scientific inquiries

Contact

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Tehran University of Medical Sciences, TUMS

Full name of responsible person

Dr. Mohammad Reza Hadian

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Person responsible for updating data

Contact

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Full name of responsible person

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Web page address

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