

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

28 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/m<sup>2</sup> 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/m<sup>2</sup>; 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**

**Street address**

Rehabilitation faculty, pich e shemiran, enghlab street

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**Person responsible for scientific inquiries**

**Contact**

**Name of organization / entity**

Tehran University of Medical Sciences, TUMS

**Full name of responsible person**

Dr. Mohammad Reza Hadian

**Position**

Professor, Faculty of Rehabilitation, TUMS

**Other areas of specialty/work**

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Rehabilitation faculty, Tehran University of Medical Sciences

**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*