

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### The Comparison of the effect of chin tuck exercise and Tai Chi on cervical curve in persons with forward head posture: single blinded randomized clinical trial

#### Protocol summary

##### Summary

Forward head posture is a common postural problem in young adults. This posture may be associated with pain, vertigo and temporomandibular dysfunction. The aim of current study is to compare and assess the effect of chin tuck and tai chi exercise on the improvement of forward head posture. There will be 40 participants in current study that randomly assigned in two equal groups of Tai Chi and chin tuck. The inclusion criteria are aged between 18 to 40 years and forward head posture. The exclusion criteria are congenital or acquired structural deformity in spine, pain and history of surgery. Chin tuck is a static stretching routinely used in forward head posture. Tai chi is a traditional dynamic Chinese exercise that is a combination of stretching and movement. The patients will do exercises 3 times weekly for six weeks. Each chin tuck session includes 10 repetition of 10 seconds stretch and each Tai Chi session includes 10 repetition of exercise. The spinal curvature will be measured before and after six weeks treatment using curvimeter.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2016063024151N4**

Registration date: **2016-09-15, 1395/06/25**

Registration timing: **registered\_while\_recruiting**

Last update:

Update count: **0**

##### Registration date

2016-09-15, 1395/06/25

##### Registrant information

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**Name of organization / entity**

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Iran (Islamic Republic of)

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**Recruitment status**

**Recruitment complete**

**Funding source**

student research committee, Isfahan University of Medical Sciences

**Expected recruitment start date**

2016-06-30, 1395/04/10

**Expected recruitment end date**

2017-02-28, 1395/12/10

**Actual recruitment start date**

empty

**Actual recruitment end date**

empty

**Trial completion date**

empty

**Scientific title**

The Comparison of the effect of chin tuck exercise and Tai Chi on cervical curve in persons with forward head posture: single blinded randomized clinical trial

**Public title**

the effect of tai chi and chin tuck on forward head posture

**Purpose**

Treatment

**Inclusion/Exclusion criteria**

Inclusion criteria: forward head posture, 18-40 yrs

Exclusion criteria : pain, congenital deformity, malignancy, fracture, infection, PMH of surgery

**Age**

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

**Gender**

Both

**Phase**

N/A

**Groups that have been masked**

*No information*

**Sample size**

Target sample size: **40**

**Randomization (investigator's opinion)**

Randomized

**Randomization description****Blinding (investigator's opinion)**

Single blinded

**Blinding description****Placebo**

Not used

**Assignment**

Parallel

**Other design features****Secondary Ids**

empty

**Ethics committees****1****Ethics committee****Name of ethics committee**

Isfahan University of Medical Sciences

**Street address**

Hezar Jerib

**City**

Isfahan

**Postal code****Approval date**

2015-12-14, 1394/09/23

**Ethics committee reference number**

IR.MUI.REC.1394.1.218

**Health conditions studied****1****Description of health condition studied**

Acquired deformity of neck

**ICD-10 code**

M95

**ICD-10 code description**

Other acquired deformities of musculoskeletal system and connective tissue

**Primary outcomes****1****Description**

cervical curve

**Timepoint**

before and after six week exercise

**Method of measurement**

special tool

**Secondary outcomes**

empty

**Intervention groups****1****Description**

Chin tuck exercise 3 sessions per week for 6 weeks and each session 10 stretch for 10 seconds

**Category**

Rehabilitation

**2****Description**

Tai Chi exercise 3 sessions per week for 6 weeks and each session 10 repetition of dynamic stretching

**Category**

Rehabilitation

**Recruitment centers****1****Recruitment center****Name of recruitment center**

Abolfazl Rehabilitation Center

**Full name of responsible person**

Hamzeh Baharlouei

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14, Mosala Street

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**Sponsors / Funding sources****1****Sponsor****Name of organization / entity**

student research committee Isfahan University of Medical Sciences

**Full name of responsible person**

Dr Hossein Yousefi

**Street address**

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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**

student research committee Isfahan 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

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## Person responsible for updating data

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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*