

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

Name

Hamzeh Baharlouei

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

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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

Name of organization / entity
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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