Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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 Chines 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

Country

Iran (Islamic Republic of)

Phone

+98 31 3792 5045

Email address

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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 surgury

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
Street address
14, Mosala Street
City
Isfahan

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
Isfahan University of Medical Sciences
City
Isfahan
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
Isfahan University of Medical Sciences

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MSc, instructor

Other areas of specialty/work

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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