

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Comparison of the effect of sustained traction with Over-the-door home traction unit and Air neck traction device on neck pain, range of motion and disability level in cervical osteoarthritis.

Protocol summary

Summary

The aim of this study is to compare the effect of sustained traction by 'Over-the-door home traction unit' and 'Air neck traction device' on neck pain, range of motion and disability level in cervical osteoarthritis. The patients randomly will be assigned to two groups. Total sample is determined 26 cases and will be chosen from the patients with cervical osteoarthritis aged from 30-70 and with more or equal to 2 neck pain grade and the positivity of 'Compression & Distraction' test. The patients with the history of neck surgery or trauma, Grade 4 osteoarthritis and complications like rheumatoid arthritis and osteoporosis will be excluded from the study. Similar physical treatments will be received in both group in each session including common physiotherapy modalities such as hot pack, TENS, Ultrasound therapy and exercises. In the end of each session, first group of patients will be treated by the "Over-the-door home traction unit" and the second group will be treated by "Air neck traction device". Treatment intervention lasted 10 sessions (2 weeks) for each individual and the intensity of pain, range of motion and disability level will be measured in the beginning of the first session and in the end of the last session.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2014081118762N1**

Registration date: **2014-10-05, 1393/07/13**

Registration timing: **prospective**

Last update:

Update count: **0**

Registration date

2014-10-05, 1393/07/13

Registrant information

Name

Mojtaba Kamyab

Name of organization / entity

Iran University of Medical Sciences

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Recruitment status

Recruitment complete

Funding source

Iran University of Medical Sciences

Expected recruitment start date

2014-11-21, 1393/08/30

Expected recruitment end date

2015-02-19, 1393/11/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the effect of sustained traction with Over-the-door home traction unit and Air neck traction device on neck pain, range of motion and disability level in cervical osteoarthritis.

Public title

The effect of traction on cervical osteoarthritis symptoms

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Age 30-70 year-old; Chief complaint:

Cervical pain with or without any upper limb symptoms; Grade 1-3 osteoarthritis diagnosis from radio-graphs; Obtaining more or equal to 10% points in "Neck Disability Index" Questionnaire; More or equal to 2 points from 10 in "Numerical Pain Rating Scale"; Positive result from "Cervical Distraction & Compression" test. Exclusion criteria: History of cervical or upper thoracic(T1-T6) trauma; History of cervical surgery; Patients with severe cervical osteoarthritis (Grade 4) diagnosis based on radio-graphs; Spinal cord canal stenosis; non-skeletal symptoms; History of cervical spine fracture or sever vertebral osteoporosis; Rheumatoid arthritis; Visible congenital deformity of cervical spine; dysfunction of vertebral artery; Pregnancy; History of failed traction treatment; Considering any cervical physical therapies in the recent last 6 weeks.

Age

From **30 years** old to **70 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **26**

Randomization (investigator's opinion)

Randomized

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

Not blinded

Blinding description**Placebo**

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

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

Ethic Commettee of Iran University of Medical Sciences

Street address

Between the cross-road of Sheykh Fazlolah and Shahid Chamran, Shahid Hemmat Highway

City

Tehran

Postal code**Approval date**

2014-06-23, 1393/04/02

Ethics committee reference number

105/1433/93/ۛ

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

Cervical arthrosis

ICD-10 code

M47

ICD-10 code description

arthrosis of spine

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

Neck pain

Timepoint

Before of first treatment session and in the end of last session

Method of measurement

Mean of total score- Numerical pain rating scale

2**Description**

Cervical range of motion

Timepoint

Before of first treatment session and in the end of last session

Method of measurement

Inclinometer-Degree

3**Description**

Neck disability index

Timepoint

Before of first treatment session and in the end of last session

Method of measurement

percent of total score-Neck disability index questioner

4**Description**

Pain relife drug and Non-steroidal anti-inflammatory drug

Timepoint

Before of first treatment session and in the end of last session

Method of measurement

Numbers-counting

Secondary outcomes

empty

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

First intervention group: Common physiotherapy treatments including hot pack for 20 minutes, TENS for 20 minutes, Ultrasound therapy for 5 minutes, isometric and isotonic neck exercises 20 times a day each time with 10 seconds of holding position and shoulder girdle isotonic exercises 60 times a day with 10 seconds of holding position. These treatments will be followed by 20 minutes of traction by the "Over-the-door home traction unit".

Category

Rehabilitation

2**Description**

Second intervention group: Common physiotherapy treatments including hot pack for 20 minutes, TENS for 20 minutes, Ultrasound therapy for 5 minutes, isometric and isotonic neck exercises 20 times a day each time with 10 seconds of holding position and shoulder girdle isotonic exercises 60 times a day with 10 seconds of holding position. These treatments will be followed by 20 minutes of traction by the "Air neck traction device"

Category

Rehabilitation

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

Hazrat Rasoul Akram Hospital

Full name of responsible person

Dr. Ali Amiri

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Department of Physiotherapy, The Seventh Floor, Seyedol Shohada Building, Hazrat Rasoul Akram Hospital, Niayesh St. Satar Khan Blv.

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

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Full name of responsible person

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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

Iran 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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Full name of responsible person

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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