

Clinical Trial Protocol

Iranian Registry of Clinical Trials

12 Jul 2026

Effects of traditional and sensory-motor training exercises on joint position sense, kinematics, inter segmental coordination, dynamic balance, pain and disability in people with chronic non-specific neck Pain

Protocol summary

Summary

Patients with neck pain are the second largest group after patients with Low back pain that attended to physical therapy. Clinical experience and research indicated that significant sensorimotor cervical proprioceptive disturbances might be an important factor in the maintenance, recurrence, or progression of various symptoms in some patients with neck pain. There is evidence that specific treatment programs that have trained cervical joint position sense, eye-neck coordination, and gaze stability result improvements not only in sensorimotor impairments but also in neck pain and disability. The aim of this study is comparing the effects of traditional exercises and sensory-motor training exercises on joint position sense, kinematics, inter segmental coordination, dynamic balance, pain and disability in people with chronic non-specific neck Pain. In this study forty patients with non-specific neck pain are randomly allocated to either a control group or specific exercise group. Patients in control group receive TENS, stretch and training deep flexors and extensors muscles and those in second group receive control group exercises plus sensory-motor exercises. The intervention period was 12 session. Also, in this study both the investigator and the participant are blind to the nature of the treatment. Assessments will performed pre and post treatment. Outcome measures are: joint position error, kinematic items, dynamic balance, pain (Visual Analogue Scales) and dis ability (Neck Disability Index).

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201604046798N1**
Registration date: **2016-06-02, 1395/03/13**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2016-06-02, 1395/03/13

Registrant information

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Name of organization / entity

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Recruitment status

Recruitment complete

Funding source

Ahvaz Jundishapur Univercity of Medical Science

Expected recruitment start date

2016-05-30, 1395/03/10

Expected recruitment end date

2016-12-20, 1395/09/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effects of traditional and sensory-motor training exercises on joint position sense, kinematics, inter segmental coordination, dynamic balance, pain and disability in people with chronic non-specific neck Pain

Public title

Comparing the effects of traditional and sensory-motor training exercises on joint position sense, kinematics, inter segmental coordination, dynamic balance, pain and disability in people with chronic non-specific neck Pain

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: People between 18 and 45 years; reported neck pain for more than three months; The minimum severity of pain according to VAS, 4 to 10 cm; Proprioception error is greater than 3 ° in both directions of movement of the neck; cervical vertigo
Exclusion criteria: Any specific reason for neck pain, such as disc protrusion; severe osteoarthritis; rheumatoid diseases and trauma; surgery in the neck; vestibular system disorders; neurological disorder, central nervous system involvement including stroke, multiple sclerosis, Parkinson's, etc; history of diabetes
Other musculoskeletal disorder such as hip problems, knee and ankle joints or spine in the last three months

Age

From **20 years** old to **50 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)

Double blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee Jundishapur University of Medical Science

Street address

Ahva Jundishapur University of Medical Sciences ; Ahvaz

City

Ahvaz

Postal code

61357-15794

Approval date

2016-02-09, 1394/11/20

Ethics committee reference number

IR.AJUMS.REC.1394.520

Health conditions studied

1

Description of health condition studied

Neck pain

ICD-10 code

M50-9

ICD-10 code description

Cervical disc disorder, unspecified

Primary outcomes

1

Description

Joint position sense, Kinematic items, Stability index

Timepoint

Before and after 12 session treatment

Method of measurement

Motion analyzer

Secondary outcomes

1

Description

Pain and Disability level

Timepoint

Before and after 12 sessions treatment

Method of measurement

Visual analog scale, Neck disability index

Intervention groups

1

Description

CONTROL: TENS, postural education, stretch, deep flexor and extensor training

Category

Rehabilitation

2

Description

control group exercises plus joint position training, eye-head coordination exercise, balance training

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Ahvaz Public Hospital and Private Clinics
Full name of responsible person
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saadat.m@ajums.ac.ir
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Person responsible for scientific inquiries

Contact

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Vice Chancellor Of Research, Ahvaz Jundishapour
Univercity of Medical Science
Full name of responsible person
Mr.Fatalizadeh
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Ahvaz Jundishapour Univercity of Medical Science,
Ahvaz, Iran
City
Ahvaz
Grant name
Grant code / Reference number
**Is the source of funding the same sponsor
organization/entity?**
Yes
Title of funding source
Vice Chancellor Of Research, Ahvaz Jundishapour
Univercity of Medical Science
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

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empty
Clinical Study Report
empty
Analytic Code

empty
Data Dictionary
empty