

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Comparison of the effect of joint mobilization and exercise on pain, range of motion and cervical motor control in patients with chronic cervicogenic headache

Protocol summary

Study aim

Comparison of the effect of joint mobilization and exercise on pain, range of motion and cervical motor control in patients with chronic cervicogenic headache

Design

The study is an experimental, interventional, and clinical trial type.

Settings and conduct

This study was conducted in Yazd in volunteer patients with cervicogenic headache.

Participants/Inclusion and exclusion criteria

Entry Criteria: 1) Ladies and gentlemen aged 18-45 years 2) Having at least 3 months of headache history 3) Having at least one headache per week 4) At least 5 criteria of CHISG 5) Positive test of upper three cervical intervertebral movements 6) Not receiving physiotherapy and / or chiropractic treatment at least a year ago 7) No signs of degeneration, radiculopathy, progressive rheumatologic and neurological diseases, long history of corticosteroid therapy, history of accident and wiplash injury, malignancy, pregnancy and depression

Intervention groups

The study consists of two groups of exercises therapy and a group of upper cervical mobilization.

Main outcome variables

Headache parameters Active cervical range of motion upper cervical rotation range of motion Craniocervical motor control Headache disability index questionnaire score

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20180714040466N1**

Registration date: **2018-12-24, 1397/10/03**

Registration timing: **retrospective**

Last update: **2018-12-24, 1397/10/03**

Update count: **0**

Registration date

2018-12-24, 1397/10/03

Registrant information

Name

Fateme Ghiasi

Name of organization / entity

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2018-08-05, 1397/05/14

Expected recruitment end date

2018-10-22, 1397/07/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the effect of joint mobilization and exercise on pain, range of motion and cervical motor control in patients with chronic cervicogenic headache

Public title

Effect of physiotherapy in treatment of cervicogenic headache

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

History of headache at least 3 months Headache frequency at least one per week At least 5 criteria of CHISG Positive test of upper three cervical intervertebral movements Not receiving of physiotherapy/ chiropractic treatment at least one year ago

Exclusion criteria:

Test Positive test for cervical Vertebral Artery and ligaments health

Age

From **18 years** old to **45 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant

Sample size

Target sample size: **30**

Randomization (investigator's opinion)

Randomized

Randomization description

Individuals are divided into two groups by the method of two-way random blocks.

Blinding (investigator's opinion)

Single blinded

Blinding description

Patients are considered blind regardless of the difference in treatment methods of the groups.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Zahedan University of Medical Sciences

Street address

Dr. Hesabi street, Zahedan University of Medical Sciences

City

Zahedan

Province

Sistan-va-Balouchestan

Postal code

9816743463

Approval date

2018-08-04, 1397/05/13

Ethics committee reference number

IR.ZAUMS.REC.1397.162

Health conditions studied

1

Description of health condition studied

cervicogenic headache

ICD-10 code

G44.8

ICD-10 code description

Other specified headache syndromes

Primary outcomes

1

Description

pain intensity

Timepoint

The beginning of treatment, session 6 and 12, one month after the end of treatment

Method of measurement

Average pain based on VAS in last week

2

Description

pain frequency

Timepoint

The beginning of treatment, session 6 and 12, one month after the end of treatment

Method of measurement

The number of days a person has had a headache last week.

3

Description

pain duration

Timepoint

The beginning of treatment, session 6 and 12, one month after the end of treatment

Method of measurement

average hours pain lasted in past week

4

Description

active cervical ROM

Timepoint

The beginning of treatment, session 6 and 12, one month after the end of treatment

Method of measurement

Active motion of the neck in the flexion, extension, lateral flexion and right and left rotation, measured by the motion analysis device.

5

Description

upper cervical rotation ROM

Timepoint

The beginning of treatment, session 6 and 12, one month after the end of treatment

Method of measurement

flexion rotation test angle, which is measured by the motion analyzer.

6

Description

craniocervical motor control

Timepoint

The beginning of treatment, session 6 and 12, one month after the end of treatment

Method of measurement

The numerical value of the pressure biofeedback in the craniocervical flexion test

7

Description

headache disability index

Timepoint

The beginning of treatment, session 6 and 12, one month after the end of treatment

Method of measurement

questionnaire score

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: exercise therapy, The patient will perform exercises for 12 sessions to strengthen the muscles of the area.

Category

Rehabilitation

2

Description

Intervention group: mobilization, The Maitland mobilization techniques will be performed on the patient for 12 sessions.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Shariati Physiotherapy

Full name of responsible person

Mahsa Zakerzadeh

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Zahedan University of Medical Sciences

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

Zahedan University of Medical Sciences

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

Zahedan University of Medical Sciences

Full name of responsible person

Mahsa Zakerzadeh

Position

student

Latest degree

Bachelor

Other areas of specialty/work

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Sharing plan**Deidentified Individual Participant Data Set (IPD)**

Undecided - It is not yet known if there will be a plan to make this available

Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan

Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form

Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available