Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 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 receiveing 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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f_ghiasi_p@zaums.ac.ir

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 ferquency

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
Street address
Mohaghegh Damad
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8916834718
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mah.zaker@gmail.com

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Zahedan University of Medical Sciences
Full name of responsible person
Dr. Bakhshani
Street address
Zahedan University of Medical Sciences,Dr.Hesabi sq.,
City
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public@zaums.ac.ir
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
Physiotherapy
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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