

Clinical Trial Protocol

Iranian Registry of Clinical Trials

11 Sep 2026

The effect of sahrman approach on headache and balance indices in patients with chronic cervicogenic headache: single blinded randomize clinical trial

Protocol summary

Study aim

The effect of Sohrman's approach on headache and balance indicators of patients with chronic cervicogenic headache

Design

Randomized, single blinded clinical trial on 32 patients with cervicogenic headache. Permutation blocks will be used for randomization. the patients randomly divided into two groups of Sohrmans exercises and routine physiotherapy group.

Settings and conduct

Razmjo Moghadam Physiotherapy Clinic Zahedan The physiotherapist evaluating the patients is blind to the treatment performed

Participants/Inclusion and exclusion criteria

Patients with cervicogenic headache aged 18 to 65 years who have neck extension and rotation extension syndrome based on Sohrman criteria. ; suffering from malignancies, severe pastoral disorders, progressive diseases

Intervention groups

The participants in the routine treatment group will be treated with hot packs, TENS with a frequency of 100 Hz and diversion of 50 microseconds, and ultrasound with a frequency of 1 megahertz and an intensity of 1 w/cm² in the paravertebral areas and trapezius muscles. The duration of each session will be 30 minutes. In the Sohrman exercise group, in addition to receiving TENS, hot pack and ultrasound (under the same conditions as in the routine treatment group), the patient will be taught functional exercises and training during daily activities to improve movement. Each exercise will be repeated in 3 series and each series 10 times. According to the diagnosis of the type of movement syndrome and including rest time, exercises will be performed for 35 to 50 minutes in each session. The number of treatment sessions will be 12 sessions, three days a week for four

weeks. All exercises will be done in each session under the supervision of a physiotherapist.

Main outcome variables

Balance, headache intensity, headache duration, headache frequency, headache disability, neck disability

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20160531028186N6**

Registration date: **2022-11-05, 1401/08/14**

Registration timing: **prospective**

Last update: **2022-11-05, 1401/08/14**

Update count: **0**

Registration date

2022-11-05, 1401/08/14

Registrant information

Name

Mohammad Hosseinifar

Name of organization / entity

Zahedan University of Medical Sciences

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2022-11-11, 1401/08/20

Expected recruitment end date

2023-06-21, 1402/03/31

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
The effect of sahrman approach on headache and balance indices in patients with chronic cervicogenic headache: single blinded randomize clinical trial

Public title
The effect of sahrman exercise on headache and balance in patients with cervical headache

Purpose
Treatment

Inclusion/Exclusion criteria
Inclusion criteria:
Men and women between the ages of 18-65 Having a history of headache for at least three months Having at least 5 of the CHISG diagnostic criteria. Having most (more than half) of Sohrman's diagnostic criteria for extension and extension rotation syndrome. Absence of: degenerative symptoms, radiculopathy, severe pastural disorders, progressive rheumatological and neurological diseases, history of accidents and whiplash injuries, malignancy. No history of neck surgery and no blood pressure disorders, vision problems, and dizziness
Exclusion criteria:
disinclination to continue treatment Aggravation of symptoms during treatment

Age
From **18 years** old to **65 years** old

Gender
Both

Phase
N/A

Groups that have been masked

- Outcome assessor

Sample size
Target sample size: **32**

Randomization (investigator's opinion)
Randomized

Randomization description
Considering that age, gender, obesity and thinness can be confounding variables based on past studies, it is necessary to match the two control and intervention groups with respect to these variables. Based on gender, age (less than or equal to 40 and more than 40 years) and obesity (thin, normal, overweight and obese) will be placed in an age-sex-obesity subgroup. Then in each subgroup of a random sequence that The permutation block method based on the table of random numbers will be used to place people in one of the control or intervention groups. The size of each block will be considered 2.

Blinding (investigator's opinion)
Single blinded

Blinding description

The outcomes is assessed by another physiotherapist who is blind to the type of treatment being given to the patient

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

Deputy of Research, Zahedan University of Medical Sciences, Jannat Blvd., Dr. Hesabi Sq

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Approval date

2022-07-24, 1401/05/02

Ethics committee reference number

IR.ZAUMS.REC.1401.165

Health conditions studied

1

Description of health condition studied

cervicogenic headache

ICD-10 code

G44

ICD-10 code description

Other headache syndromes

Primary outcomes

1

Description

balance

Timepoint

Before and after treatment and one month after treatment

Method of measurement

Biodex SD device

2

Description

Headache intensity

Timepoint

Before and after treatment and one month after treatment

Method of measurement

visual analog scale

Secondary outcomes**1****Description**

Headache disability

Timepoint

Before and after treatment and one month after treatment

Method of measurement

Headache Disability Questionnaire

2**Description**

neck disability

Timepoint

Before and after treatment and one month after treatment

Method of measurement

Neck disability index

3**Description**

Duration of headache

Timepoint

Before and after treatment and one month after treatment

Method of measurement

questionnaire

4**Description**

frequency of headache

Timepoint

Before and after treatment and one month after treatment

Method of measurement

questionnaire

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

Intervention group: Sohrman's exercises: In the Sohrman exercise group, in addition to receiving TENS, hot packs and ultrasound (under the same conditions as in the routine treatment group), the patient will be taught exercises and functional training during daily activities to improve movement. Each exercise is repeated in 3 series and each series 10 times. According to the type of movement syndrome and including rest time, exercises will be done for 35 to 50 minutes in each session. The

number of treatment sessions will be 12 sessions, three days a week for four weeks.

Category

Rehabilitation

2**Description**

Participants in the routine treatment group will be treated with hot packs, TENS with a frequency of 100 Hz and 50 microseconds duration, and ultrasound with a frequency of 1 megahertz and an intensity of 1 w/cm². The electrodes will be placed in the occipital and paravertebral areas on both sides, and the intensity of the current used for each patient will be adjusted to the level of pain-free paresthesia. Ultrasound will be applied in the areas of the paravertebral muscles and the upper and outer edge of the upper trapezius muscle, unilaterally and for 5 minutes. The duration of each session will be 30 minutes

Category

Rehabilitation

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

Razmjo Moghadam Physiotherapy Clinic

Full name of responsible person

Dr. Mohammad Hosseinifar

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Dept. of Physiotherapy, School of Rehabilitation Sciences, Razmejo Moghadam Laboratory, Ayatoallah Kafami St.

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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

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

Dr. Mohammad Hosseinifar

Position

PhD in Physiotherapy

Latest degree

Ph.D.

Other areas of specialty/work

Physiotherapy

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Position

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Latest degree

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Other areas of specialty/work

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Person responsible for updating data

Contact

Name of organization / entity

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Full name of responsible person

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Position

PhD in Physiotherapy

Latest degree

Ph.D.

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Yes - There is a plan to make this available

Data Dictionary

Yes - There is a plan to make this available

Title and more details about the data/document

All the main outcome data can be shared.

When the data will become available and for how long

6 months after printing the results

To whom data/document is available

Researchers working in academic and scientific institutions

Under which criteria data/document could be used

Researchers and experts in this field must ensure that data is not misused

From where data/document is obtainable

afsanehsamiei72@yahoo.com

What processes are involved for a request to access data/document

The applicant must be fully and transparently identified and express his intention at his request. About 2 to 4 weeks after verification, the data will reach him.

Comments