Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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 pastural 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

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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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Province

Sistan-va-Balouchestan

Postal code

9816743463

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
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Sponsors / Funding sources

1

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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
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Full name of responsible person
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Position
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Person responsible for updating data

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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