Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

The effectiveness of one session dry needling of Sternocleidomastoid on pain and disability in patient with cervicogenic headache

Protocol summary

Study aim
investigating the effect of dry needling of sternocleidomastoid on pain and disability in patient with cervicogenic headache
Design
Quasi-experimental Study, Before and After clinical trial
Settings and conduct
Twenty patients with a clinical diagnosis of Cervicogenic headache and active trigger points in the sternocleidomastoid muscle are screen for eligibility criteria. Then the patient is asked to write headache frequency and headache duration (by hours) and headache intensity (by visual analogue scale) within 2 weeks and fill Persian version of headache disability questionnaire, after 2 weeks they receive trigger point dry needling of Sternocleidomastoid muscle, and they are requested to write headache frequency and headache duration and headache intensity within 2 weeks after intervention and fill Persian version of headache disability questionnaire again.
Participants/Inclusion and exclusion criteria
inclusion criteria: patient with unilateral headache that headache frequency of at least 1 per week over a period greater than 3 months. exclusion criteria: dry needling contraindication, history of diagnosed primary headache
Intervention groups
one session dry needling of sternocleidomastoid muscle
Main outcome variables
pain and disability in patient with cervicogenic headache

General information

Reason for update
Acronym
IRCT registration information
IRCT registration number: **IRCT20181109041599N1**
Registration date: **2019-05-04, 1398/02/14**
Registration timing: **registered_while_recruiting**
Last update: **2019-05-04, 1398/02/14**
Update count: **0**
Registration date
2019-05-04, 1398/02/14

Registrant information
Name
Zahra Mohammadi
Name of organization / entity
Country
Iran (Islamic Republic of)
Phone
+98 31 3261 0840
Email address
zahra.mohammadi_73@yahoo.com

Recruitment status
Recruitment complete
Funding source

Expected recruitment start date
2019-02-20, 1397/12/01
Expected recruitment end date
2019-05-22, 1398/03/01
Actual recruitment start date
empty
Actual recruitment end date
empty
Trial completion date
empty

Scientific title
The effectiveness of one session dry needling of Sternocleidomastoid on pain and disability in patient with cervicogenic headache

Public title
Effect of dry needling in treatment of cervicogenic headache
Purpose
Treatment
Inclusion/Exclusion criteria

Inclusion criteria:
unilateral pain that radiating to the frontotemporal region pain aggravated by neck movement and/or sustained awkward head positions moderate to severe non throbbing pain presence of active triggger points in the sternocleidomastoid muscle Having reading and writing skills headache frequency of at least 1 per week over a period greater than 3 months
Exclusion criteria:
cervical radiculopathy a history of neck trauma; trigger point therapy or trigger point dry needling in the neck within the previous 6 months subjects > 65 y due to vascular defects evidence of cognitive deficits dry needling contraindication : needle phobia, pregnancy, ... previously had surgery in the neck or shoulder area a history of diagnosed primary headache the presence of any tumor in the region systemic disease: diabetes, anemia and ...

Age
From **18 years** old to **60 years** old
Gender
Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **20**
Randomization (investigator's opinion)
N/A
Randomization description
Blinding (investigator's opinion)
Not blinded
Blinding description
Placebo
Not used
Assignment
Single
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of Isfahanm university of medical sciences
Street address
departement of rehabilitationT, Isfahan University Of Medical sciences, University Blvd., Isfahan
City
Isfahan
Province
Isfehan
Postal code
8174673461
Approval date
2019-01-23, 1397/11/03
Ethics committee reference number
IR.MUI.RESEARCH.REC.1397.374

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
headache intensity
Timepoint
2 weeks before and 2 weeks after intervention
Method of measurement
visual analogue scale

Secondary outcomes

1

Description
headache frequency
Timepoint
2 weeks before and 2 weeks after intervention
Method of measurement
days with headache

2

Description
headache duration
Timepoint
2 weeks before and 2 weeks after intervention
Method of measurement
hours with headache

3

Description
headache disability index
Timepoint
2 weeks before and 2 weeks after intervention
Method of measurement
Persian version of headache disability

Intervention groups

1

Description
Intervention group: one session trigger point dry

needling of Sternocleidomastoid muscle which is performed 10 times in the muscle.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Rehabilitation department

Full name of responsible person

Zahra Mohammadi

Street address

rehabilitation department, Isfahan university of medical science, university Blvd, Isfahan, Isfahan

City

Isfahan

Province

Isfehan

Postal code

۸۱۷۴۶۷۳۴۶۱

Phone

+98 31 3792 5000

Email

tavanbakhshi@rehab.mui.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Esfahan University of Medical Sciences

Full name of responsible person

Shaghayegh Haghjooye javanmard

Street address

rehabilitation department, Isfahan university of medical science, university Blvd, Isfahan, Isfahan

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Postal code

۸۱۷۴۶۷۳۴۶۱

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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

Esfahan 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

Esfahan University of Medical Sciences

Full name of responsible person

Zahra Mohammadi

Position

student

Latest degree

Master

Other areas of specialty/work

Physiotherapy

Street address

rehabilitation department, Isfahan university of medical science, university Blvd, Isfahan, Isfahan

City

Isfahan

Province

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۸۱۷۴۶۷۳۴۶۱

Phone

+98 31 3792 5000

Email

zahra.mohammadi_73@yahoo.com

Person responsible for scientific inquiries

Contact

Name of organization / entity

Esfahan University of Medical Sciences

Full name of responsible person

zahramohammadi

Position

student

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Person responsible for updating data

Contact

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Esfahan University of Medical Sciences

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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
Individual Participant Data: all collected deidentified IPD

When the data will become available and for how long
starting 6 months after publication

To whom data/document is available
people working in academic institutions

Under which criteria data/document could be used
using for Supplementary study

From where data/document is obtainable
e-mail address : Zahra.mohammadi_73@yahoo.com

What processes are involved for a request to access data/document
name, address, position, title of study and protocol of study

Comments