Clinical Trial Protocol
Iranian Registry of Clinical Trials

24 Sep 2026

Comparative study of the effect of lumbar and cervical myofascial release on flexibility, pain and quality of life in cervicogenic headache patients

Protocol summary

Study aim
studying the effect of myofascial release on cervical ROM and myofascial elasticity in cervicogenic patients, and also studies the effect of application of myofascial release in lumbar region on cervical region

Design
clinical trial with parallel groups

Settings and conduct
Myofascial release is a manual therapy technique which is focused on fascial elasticity by applying compressive and tensile forces. the place of this study is in the shahid bahonar hospital in the city of kerman

Participants/Inclusion and exclusion criteria
cervicogenic headache patients with the age between 20 and 50 and myofascial tissue stiffer than normal group; diagnosis of other types of headaches and application of physical therapy at recent 6 months

Intervention groups
1- application of myofascial release on cervical region 2- application of myofascial release on lumbar region

Main outcome variables
coefficient of elastic. range of motion of the neck, intensity of the pain, quality of life, range of motion of the lumbar region, the amount of forward head, the amount of inclination of the pelvis

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20190221042794N1**
Registration date: **2019-07-18, 1398/04/27**
Registration timing: **prospective**

Last update: **2019-07-18, 1398/04/27**
Update count: **0**

Registration date
2019-07-18, 1398/04/27

Registrant information

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Mahdi Tavakkoli

Name of organization / entity
The University of Tarbiat Modares

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2019-08-23, 1398/06/01

Expected recruitment end date
2020-02-20, 1398/12/01

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Comparative study of the effect of lumbar and cervical myofascial release on flexibility, pain and quality of life in cervicogenic headache patients

Public title
effect of myofascial release on cervicogenic headache

Purpose
Treatment

Inclusion/Exclusion criteria

Inclusion criteria:
age between 20 and 30 years suffering from CGH based on the diagnosis of specialized doctor according to

ICHD-2018-3 the tragus at least 2/5 centimeter at the anterior of vertical line the amount of lumbar flexion lesser than 35 degrees headache at least once a week in recent 2 months based on VAS the intensity of headache should be at least 5 BMI between 18 to 24 and 24 to 30 the elastic coefficient of the cervical region should be higher than the normal group

Exclusion criteria:

Age

From **20 years** old to **50 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant

Sample size

Target sample size: **40**

Randomization (investigator's opinion)

Not randomized

Randomization description

Blinding (investigator's opinion)

Single blinded

Blinding description

non informing the patient the groups and their intervention

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

ethics committee of tarbiat modares university of tehran

Street address

No. 9, Shahid Shirvani Ave., jomhuri Eslami Blvd.

City

Kerman

Province

Kerman

Postal code

7618937773

Approval date

2019-01-27, 1397/11/07

Ethics committee reference number

IR.Modares.Rec.1397.238

Health conditions studied

1

Description of health condition studied

cervicogenic headache

ICD-10 code

G44.89

ICD-10 code description

Other headache syndrome

Primary outcomes

1

Description

Elastic Coeffecient

Timepoint

2 weeks before the intervention, before the intervention, after the intervention

Method of measurement

sonography apparatus

Secondary outcomes

1

Description

cervical range of motion

Timepoint

2 weeks before the intervention, before the intervention, after the intervention

Method of measurement

goniometer

2

Description

intensity of the pain

Timepoint

2 weeks before the intervention, before the intervention, after the intervention

Method of measurement

visual analogue scale

3

Description

quality of life

Timepoint

2 weeks before the intervention, before the intervention, after the intervention, 4 weeks after the intervention

Method of measurement

Headache Impact Test with 6 questions (HIT6)

4

Description

range of motion of lumbar flexion

Timepoint

2 weeks before the intervention, before the intervention, after the intervention

Method of measurement

flexible ruler

5

Description
amount of forward head
Timepoint
2 weeks before the intervention, before the intervention, after the intervention
Method of measurement
ruler

6

Description
amount of inclination of the pelvis
Timepoint
2 weeks before the intervention, before the intervention, after the interventio
Method of measurement
goniometer

Intervention groups

1

Description
Intervention group: myofascial release of lumbar region
Category
Rehabilitation

2

Description
Intervention group: myofascial release of cervical region
Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
Shahid Bahonar hospital
Full name of responsible person
Farid Bahrpeyma
Street address
Sepah Ave.
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
tarbiat modares university
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yaaghub fathollahi
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Jalal AleAhmad, Nasr bridge
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14115-111
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pres@modares.ac.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
tarbiat modares university
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
tarbiat modares university
Full name of responsible person
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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