

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Comparison of the effectiveness of Cervical Translatory Mobilizations with Cervical Stability Training in female patients with Cervicogenic Headache

Protocol summary

Study aim

To determine the comparative effectiveness of cervical translatory mobilizations with cervical stability training on pain and mobility in female patients with cervicogenic headache.

Design

Randomized controlled trial

Settings and conduct

SETTING: Orthopedic Department, Mayo Hospital, Lahore. Neurology Department, Mayo Hospital, Lahore. Physiotherapy Department, Mayo Hospital, Lahore. DURATION OF STUDY: Six months after the approval of synopsis

Participants/Inclusion and exclusion criteria

Inclusion Criteria: Female patients aged 20-40 years
Diagnosis of cervicogenic headache
Positive cervical flexion-rotation test (FRT)
Exclusion Criteria: Patients previously receiving treatment for underlying pathology. Patients presented with red flag signs for headache. Patients presented with migraine. Patients in whom manual therapy is contraindicated. Patients who are diagnosed with radiculopathy. Patients who are taking analgesics.

Intervention groups

GROUP-A: Cervical Translatory Mobilization This group will receive a 10-minute treatment consisting of 30-second series of translatory mobilizations of the upper cervical spine with 10-second rest periods between sets.
GROUP-B: Cervical Stability Training The Cervical Stability Training consists of three application phases. The first phase will improve muscular coordination and proprioception. The second phase will improve muscular endurance and strength. The final phase will improve muscular strength as well. The intensity of exercise in the third phase will be slightly higher than in the second phase. Based on the exercise tolerance of the patients, all exercises will be repeated 7-10 times during the first

week and 10-15 times during the second week of each phase.

Main outcome variables

Pain reduction
Increasing range of motion
Reduced disability

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20220518054910N1**
Registration date: **2023-05-31, 1402/03/10**
Registration timing: **registered_while_recruiting**

Last update: **2023-05-31, 1402/03/10**

Update count: **0**

Registration date

2023-05-31, 1402/03/10

Registrant information

Name

Yasham Afzal

Name of organization / entity

King Edward Medical University

Country

Pakistan

Phone

+92 323 7888180

Email address

yashamafzal61@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-03-15, 1401/12/24

Expected recruitment end date

2023-07-31, 1402/05/09

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the effectiveness of Cervical Translatory Mobilizations with Cervical Stability Training in female patients with Cervicogenic Headache

Public title

COMPARISON OF THE EFFECTIVENESS OF CERVICAL TRANSLATORY MOBILIZATIONS WITH CERVICAL STABILITY TRAINING IN FEMALE PATIENTS WITH CERVICOGENIC HEADACHE: A RANDOMIZED CONTROLLED TRIAL

Purpose

Health service research

Inclusion/Exclusion criteria

Inclusion criteria:

The study will include female patients aged 20-40 years. A diagnosis of cervicogenic headache (pain aggravated by neck movement, sustained position or external pressure, restricted cervical range of motion, and unilateral pain starting in the neck and radiating to the frontotemporal region) Positive cervical flexion-rotation test (FRT)

Exclusion criteria:

Patients previously receiving treatment for underlying pathology. Patients presented with red flag signs for headache. Patients presented with migraine. Patients in whom manual therapy is contraindicated. Patients who are diagnosed with radiculopathy. Patients who are taking analgesics.

Age

From **20 years** old to **40 years** old

Gender

Female

Phase

N/A

Groups that have been masked

- Participant
- Care provider
- Investigator
- Outcome assessor
- Data analyser
- Data and Safety Monitoring Board

Sample size

Target sample size: **82**

Randomization (investigator's opinion)

Randomized

Randomization description

All the participants who came to the physiotherapy department were considered and screened for cervicogenic headache with restricted neck movements. 82 patients were allotted to two groups i.e.; group A(CTM) and group B(CST) via a computer-generated randomized list, 41 in each group. Considered the

inclusion and exclusion criteria before concerning them in the study. Informed consent was taken whether they were willing to participate or not in written form.

Blinding (investigator's opinion)

Double blinded

Blinding description

Participants were allocated to two treatment groups named A and B. None of the participants know which of the two modes of ultrasound has been used on him/her as both modes require the ultrasound machinery and nothing else. The care provider has been giving treatment according to the protocols decided and he/she has no role in measuring the results. The outcome assessor or the investigator is involved in the outcome measurements of both groups and has no role in applying treatment protocols to the patients or the randomization. The data analyzer is involved in the analysis of data only and has no role in randomization, treatment application, or outcome measurement. None of the members of DSMB are involved in the application of randomization, treatment application, outcome measurement, or data analysis.

Placebo

Not used

Assignment

Parallel

Other design features

Parallel groups, single blinded, single setting

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Advanced Studies and Research Board

Street address

Neela Gumbad, New Anarkali, Lahore

City

LAHORE

Postal code

54000

Approval date

2022-04-05, 1401/01/16

Ethics committee reference number

2543/KEMU/2022

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

Pain

Timepoint

Before applying Intervention and at week 3 and week 6 of intervention.

Method of measurement

Visual Analogue Scale

2

Description

Range of Motion (Upper Cervical)

Timepoint

Before applying Intervention and at week 3 and week 6 of intervention.

Method of measurement

Goniometer

3

Description

Range of Motion (General Cervical)

Timepoint

Before applying Intervention and at week 3 and week 6 of intervention.

Method of measurement

Goniometer

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Cervical Translatory Mobilizations

Category

Rehabilitation

2

Description

Intervention group: Cervical Stability Training

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

King Edward Medical University, Mayo Hospital,
Lahore Pakistan

Full name of responsible person

Yasham Afzal

Street address

Nila Gumbad Chowk, Neela Gumbad Lahore.

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Lahore

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54000

Phone

+92 323 7888180

Email

yashamafzal61@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

King Edward Medical University, Mayo Hospital Lahore

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

King Edward Medical University, Mayo Hospital Lahore

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

King Edward Medical University, Mayo Hospital Lahore

Full name of responsible person

Yasham Afzal

Position

Post Graduate Resident

Latest degree

Master

Other areas of specialty/work

Physiotherapy

Street address

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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

Data will be shared in the form of Excel and Microsoft Word files.

When the data will become available and for how long

6 months after publication

To whom data/document is available

Only available for people working in academic institutions

Under which criteria data/document could be used

The person responsible for data updates will be reviewing requests for data. Data will be shared through email.

From where data/document is obtainable

yashamafzal61@gmail.com

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

Provide full detail of the reason you want to pursue data from my study. Then wait for a max of one month to receive it if the request for data is approved.

Comments