

Clinical Trial Protocol

Iranian Registry of Clinical Trials

13 Jun 2026

Comparative Effects of Muscle Energy technique and Soft Tissue Technique for Tension headache Among Medical Students

Protocol summary

Study aim

The study aim is to evaluate which technique proved to be more effective Muscle energy technique or soft tissue technique to relieve Tension headache among medical students

Design

A randomized clinical trial with two parallel groups, a single blinded study with 10 patients in each group.

Settings and conduct

The study is conducted in Faisalabad on students who are studying in The University of Faisalabad, Govt College University Faisalabad. Study is single blinded; subjects are blinded in the study. Twenty subjects are divided in two groups containing 10 participants in each. Participants in group A received Muscle Energy Technique (PIR) 5 reps 3 sets with 10 seconds hold while Group B received Soft Tissue Technique (kneading in which Skin and soft tissues move in circular pattern, tissues are slowly lifted, rolled and squeezed). Both interventions were given 10-15 minutes per day for 20 days

Participants/Inclusion and exclusion criteria

Inclusion Criteria: Subjects of age 18-40 were selected. Both male and female subjects were selected. Subjects having tension headache that bilaterally located last from 30 min not associated with nausea or vomiting were selected. Exclusion Criteria: Subjects with any malignancy of cervical, upper limb and spine were excluded. Subjects with history of epilepsy, panic attacks were excluded. Subjects having collar on cervical region were excluded.

Intervention groups

Subjects are divided in two groups containing 10 participants in each. Participants in group A received Muscle Energy Technique. Group B received Soft Tissue Technique.

Main outcome variables

Pain, Impact of headache, disability

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20240811062723N1**

Registration date: **2024-08-17, 1403/05/27**

Registration timing: **retrospective**

Last update: **2024-08-17, 1403/05/27**

Update count: **0**

Registration date

2024-08-17, 1403/05/27

Registrant information

Name

Mahnoor Shaikh

Name of organization / entity

The University of Faisalabad

Country

Pakistan

Phone

+92 46 7602004

Email address

mahnoordpt18@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2024-02-17, 1402/11/28

Expected recruitment end date

2024-03-17, 1402/12/27

Actual recruitment start date

2024-02-17, 1402/11/28

Actual recruitment end date

2024-03-17, 1402/12/27

Trial completion date

2024-03-17, 1402/12/27

Scientific title

Comparative Effects of Muscle Energy technique and Soft Tissue Technique for Tension headache Among Medical Students

Public title

Comparative Effects of Muscle Energy technique and Soft Tissue Technique for Tension headache Among Medical Students

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Subjects of age 18-40 were selected. Both male and female subjects were selected Subjects having tension headache that bilaterally located last from 30 min not associated with nausea or vomiting were selected

Exclusion criteria:

Subjects with any recent trauma (less than 4 weeks) were excluded Subjects with any malignancy of cervical, upper limb and spine were excluded Subjects with history of epilepsy, panic attacks were excluded Subjects having collar on cervical region were excluded Subjects with vertebrobasilar insufficiency were excluded

Age

From **18 years** old to **40 years** old

Gender

Both

Phase

3

Groups that have been masked

- Participant

Sample size

Target sample size: **20**

Actual sample size reached: **20**

Randomization (investigator's opinion)

Randomized

Randomization description

Simple random sampling was used to allocate the patients. The list of patients was generated through online randomization generator. According to the list patients were assigned into group 1 and group 2.

Blinding (investigator's opinion)

Single blinded

Blinding description

The participants are blinded in this study

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1**

Ethics committee

Name of ethics committee

Research and Ethics/ Technical committee for The University of Faisalabad

Street address

University Avenue, Faisal Town Canal Road, Faisalabad Punjab.

City

Faisalabad

Postal code

38000

Approval date

2024-02-17, 1402/11/28

Ethics committee reference number

TUF/DR/SAA/MSPP/2024/376

Health conditions studied**1****Description of health condition studied**

Tension headache

ICD-10 code**ICD-10 code description****Primary outcomes****1****Description**

Pain

Timepoint

Before intervention, after 10 days and 3 weeks of intervention

Method of measurement

Visual analogue used

2**Description**

Impact of headache

Timepoint

Before intervention, after 10 days and 3 weeks of intervention

Method of measurement

Headache impact test HTI-6 used

3**Description**

Disability

Timepoint

Before intervention, after 10 days and 3 weeks of intervention

Method of measurement

Headache disability index

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group 1: Muscle energy technique, Participants in group 1 received muscle energy technique (Post Isometric Relaxation) 5 reps 3 sets with 10 seconds hold.

Category

Treatment - Other

2

Description

Intervention group 2: soft tissue technique, Group 2 received soft tissue technique (kneading in which skin and soft tissues move in circular pattern, tissues are slowly lifted, rolled and squeezed).

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

The University of Faisalabad, Govt College University Faisalabad

Full name of responsible person

Dr Sundas Farooq

Street address

Canal Road, Faisalabad

City

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Phone

+92 303 4005272

Email

assistant.prof.dpt@tuf.edu.pk

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

The University of Faisalabad

Full name of responsible person

Dr Sundas Farooq

Street address

University Avenue, Faisal Town Canal Road, Faisalabad Punjab.

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Phone

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Email

assistant.prof.dpt@tuf.edu.pk

Web page address

http://tuf.edu.pk

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

The University of Faisalabad

Proportion provided by this source

100

Public or private sector

Private

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

The University of Faisalabad

Full name of responsible person

Mahnour Shaikh

Position

student

Latest degree

Bachelor

Other areas of specialty/work

Physiotherapy

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Person responsible for scientific inquiries

Contact

Name of organization / entity

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Full name of responsible person

Mahnour Shaikh

Position

Student

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**

The University of Faisalabad

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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

No - There is not 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

Comparative Effects of Muscle Energy Technique and Soft Tissue Technique for Tension Headache Among Medical Students

When the data will become available and for how long

Starting six months after the publication and it will remain available for everyone

To whom data/document is available

This will be available for everyone

Under which criteria data/document could be used

assistant.prof.dpt@tuf.edu.pk (mobile no +923034005272)

From where data/document is obtainable

2022-ms-pt-005@tuf.edu.pk (mobile no +923467602004)

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

Any applicant just need to contact through email at 2022-ms-pt-005@tuf.edu.pk (mobile no +923467602004)

Comments