

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 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

Faisalabad

#### Postal code

38000

#### 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.

#### City

Faisalabad

#### Postal code

38000

#### Phone

+92 303 4005272

#### 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

#### Street address

p 16 Chiniot bazar, Faisalabad, Pakistan

#### City

Faisalabad

#### Province

Punjab

#### Postal code

38000

#### Phone

+92 46 7602004

#### Email

2022-ms-pt-005@tuf.edu.pk

## Person responsible for scientific inquiries

### Contact

#### Name of organization / entity

The University of Faisalabad

#### Full name of responsible person

Mahnour Shaikh

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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**