Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
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University Avenue, Faisal Town Canal Road, Faisalabad Punjab.
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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
Mahnoor Shaikh
Position
student
Latest degree
Bachelor
Other areas of specialty/work
Physiotherapy
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Person responsible for scientific inquiries

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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
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