

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Comparative effects of muscle energy technique and deep friction massage along with static stretching of extensor carpi radialis brevis in patients with lateral epicondylitis

Protocol summary

Study aim

To evaluate the effects of METS and Deep friction massage along with Static Stretching of Extensor carpi Radialis brevis in patients with lateral epicondylitis.

Design

Pragmatic, community based, parallel group, double binding, randomised clinical trial the calculated sample size is 24. After adding 20% dropout ratio, it becomes 30.

Settings and conduct

Conduct randomized clinical trial blinding Double blinding was used as patient and assessor was blind, i.e, patient was unaware of which treatment was applied to them and assessor was also unaware during assessment which treatment was provided to that subject.

Participants/Inclusion and exclusion criteria

Patients with pain in extension of wrist with resistance
Patients having pain with passive wrist flexion with the elbow extension Tenderness on palpation on elbow
Moderate level of pain (4/10) Age b/w 25 to 50 years
Positive Cozen's Test Exclusion Criteria Neurological Deficit Previous trauma to the elbow region History of recent surgery in cervical region, upper limb or heart related surgery Dislocation of elbow in previous 3months
Diagnosed degenerative disease

Intervention groups

Subjects in Group A received MET Group B was treated two times a week for four weeks with deep transverse friction massage at the tendon origin for 15 minutes.

Main outcome variables

Pain, Wrist grip, Functional limitation

General information

Reason for update

Acronym

Comparative effects of muscle energy technique and deep friction massage along with static stretching of

extensor carpi radialis brevis in patients with lateral epicondylitis

IRCT registration information

IRCT registration number: **IRCT20240517061825N1**

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

Ayesha Hassan

Name of organization / entity

The University Of Faisalabad

Country

Pakistan

Phone

+92 340 6822985

Email address

2022-ms-pt-057@tuf.edu.pk

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2024-02-17, 1402/11/28

Expected recruitment end date

2024-03-16, 1402/12/26

Actual recruitment start date

2024-02-17, 1402/11/28

Actual recruitment end date

2024-03-16, 1402/12/26

Trial completion date

2024-03-16, 1402/12/26

Scientific title

Comparative effects of muscle energy technique and deep friction massage along with static stretching of extensor carpi radialis brevis in patients with lateral epicondylitis

Public title

Comparative effects of muscle energy technique and deep friction massage along with static stretching of extensor carpi radialis brevis in patients with lateral epicondylitis

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Patients with pain in extension of wrist with resistance
Patients having pain with passive wrist flexion with the elbow extension
Tenderness on palpation on elbow
Moderate level of pain (4/10)
Age b/w 25 to 50 years
Positive Cozen's Test

Exclusion criteria:

Neurological Deficit
Previous trauma to the elbow region
History of recent surgery in cervical region, upper limb or heart related surgery
Dislocation of elbow in previous 3 months
Diagnosed degenerative disease

Age

From **25 years** old to **50 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant

Sample size

Target sample size: **30**

Actual sample size reached: **30**

Randomization (investigator's opinion)

Randomized

Randomization description

In this study, participants will be randomly assigned to either the intervention group A and group B using a computer-generated random sequence. Block randomization will be employed to ensure equal allocation across groups. The randomization sequence will be concealed using sealed, opaque envelopes, and the trial will be double-blinded to minimize bias. Randomization is used to ensure comparable groups and to reduce selection bias in the trial.

Blinding (investigator's opinion)

Double blinded

Blinding description

Double blinding was used as patient and assessor was blind, i.e, patient was unaware of which treatment was applied to them and assessor was also unaware during assessment which treatment was provided to that subject.

Placebo

Not used

Assignment

Other

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

37000

Approval date

2024-02-17, 1402/11/28

Ethics committee reference number

TUF/Addl Reg/SB/792

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

Lateral Epicondylitis

ICD-10 code

M77.10

ICD-10 code description

Lateral epicondylitis, unspecified elbow

Primary outcomes**1****Description**

Pain

Timepoint

Before intervention and after intervention

Method of measurement

Numeric pain rating scale

Secondary outcomes**1****Description**

Wrist grip

Timepoint

Before intervention and after intervention

Method of measurement

Hand held dynamometer

Intervention groups

1

Description

"Intervention group 1: subjects in group A received muscle energy technique approach with ultrasound therapy for four weeks twice in a week in compare with intervention group B received deep friction massage along with static stretching of extensor carpi radialis brevis for four weeks twice in a week."

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Allied hospital

Full name of responsible person

Maryum Hassan

Street address

Dr.tusi road

City

Faisalabad

Postal code

37000

Phone

+92 321 4142222

Email

maryumhassan056@gmail.com

Web page address

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

The university of faisalabad

Full name of responsible person

Saqlain babar

Street address

University Avenue, Faisal Town Canal Road,
Faisalabad, Punjab

City

Faisalabad

Postal code

37000

Phone

+92 315 6205017

Email

syedsaqlainbabar21@gmail.com

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

Sponsor: country of origin

Country of origin

PK

Type of organization providing the funding

Other

Person responsible for general inquiries

Contact

Name of organization / entity

The university of faisalabad

Full name of responsible person

Nawal nasir

Position

cosultant

Latest degree

Master

Other areas of specialty/work

Physiotherapy

Street address

University Avenue, Faisal Town Canal Road,
Faisalabad, Punjab

City

Faisalabad

Province

Punjab

Postal code

37000

Phone

+92 311 6169718

Email

nowalnasil9@gmail.com

Person responsible for scientific inquiries

Contact

Name of organization / entity

The university of faisalabad

Full name of responsible person

Ahsan Ali

Position

consultant

Latest degree

Master

Other areas of specialty/work

Physiotherapy

Street address

University Avenue, Faisal Town Canal Road,
Faisalabad, Punjab

City

faisalabad

Province

punjab

Postal code

37000

Phone

+92 303 8301956

Email

2022-ms-pt-053@tuf.edu.pk

Person responsible for updating data

Contact

Name of organization / entity

The university of faisalabad

Full name of responsible person

Ayesha Hassan

Position

Consultant

Latest degree

Master

Other areas of specialty/work

Physiotherapy

Street address

University Avenue, Faisal Town Canal Road,
Faisalabad, Punjab

City

Pakistan

Province

Punjab

Postal code

37000

Phone

+92 340 6822985

Email

saye6784@gmail.com

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

Comparative effects of muscle energy technique and deep friction massage along with static stretching of extensor carpi radialis brevis

When the data will become available and for how long

30 days after publication

To whom data/document is available

30 days after publication

Under which criteria data/document could be used

Access to the data will be facilitated through specified mechanism such as a secure online portal or data sharing platform. Requests for access will be reviewed by a designated committee or entity responsible for ensuring that they meet established criteria and comply with relevant regulations and guidelines. Additional supporting information and documents maybe provided to assist requester in understanding the available data and its potential applications.

From where data/document is obtainable

The university of faisalabad 38000

<http://tuf.edu.pk/0092418750971-5> Fax: +92 41 875 0970

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

To receive the documents or data files the process typically involves the following steps 1; Request initiation 2 verification and authorization 3 processing time 4 document retrieval or data extraction 5 Quality assurance 6 delivery 7 cofirmation of receipt

Comments

Nothing