

Clinical Trial Protocol

Iranian Registry of Clinical Trials

12 Sep 2026

Effect of myofascial release and muscle energy technique on quadratus lumborum in patients with non specific low back pain

Protocol summary

Study aim

To check the effect of Myofascial release and muscle energy technique on quadratus lumborum in patients with non-specific low back pain patients

Design

A randomized clinical trial was conducted with three parallel groups, a single blinded study of third phase in 20 patients in each group that are 60 in total .

Settings and conduct

Allied hospital faisalabad and Madinah teaching hospital .

Participants/Inclusion and exclusion criteria

Informed consent of the patient Diagnosed patient with non specific low back pain Age 18 to 40 years Gender both male and female Patient with pain at the attachment of quadratus lumborum Patients with restricted lateral flexion less than 25 degrees Pain on NPRS in range between 3-7 Patients with history of any spinal surgery in past six months Pathology of spine like tumor,tuberculosis,osteoporosis etc Patients with altered sensation (motor or sensory) Patient with spinal cord injury in past six months Any pathological condition related to hip joint e.g arthritis ,total knee replacement,total hip replacement or pregnancy etc.

Intervention groups

GRP A:First, a hot pack is administered as a baseline treatment. 3reps of the treatment will take a total of 15 min. MET of QL given for 10-30 sec GRP B: The caudal hand was put on the participant's thigh, while the cranial arm's elbow was positioned above QL. Elbow was positioned obliquely close to the center of the column, applying minimal pressure. The individual's leg was gently pulled sideways by another hand. There are seven minutes . GRP C:total treatment time is 22 mins .Both techniques METand MFR is given in this group.

Main outcome variables

NPRS , ODI and Inclinator

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20240330061389N1**

Registration date: **2024-08-05, 1403/05/15**

Registration timing: **registered_while_recruiting**

Last update: **2024-08-05, 1403/05/15**

Update count: **0**

Registration date

2024-08-05, 1403/05/15

Registrant information

Name

Amna Anwar

Name of organization / entity

The University of Faisalabad

Country

Pakistan

Phone

+92 41 2647086

Email address

amnaanwar262@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2024-04-15, 1403/01/27

Expected recruitment end date

2024-08-20, 1403/05/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of myofascial release and muscle energy technique on quadratus lumborum in patients with non specific low back pain

Public title

Effect of MFR and met on quadratus lumborum in non specific low back pain

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Informed consent of the patient Diagnosed patient with non specific low back pain Age 18 to 40 years Gender both male and female Patient with pain at the attachment of quadratus lumborum Patients with restricted lateral flexion less than 25 degrees Pain on NPRS in range between 3-7

Exclusion criteria:

Patients with history of any spinal surgery in past six months Pathology of spine like tumor, tuberculosis, osteoporosis etc Patients with altered sensation (motor or sensory) Patient with spinal cord injury in past six months Any pathological condition related to hip joint e.g arthritis ,total knee replacement ,total hip replacement or pregnancy etc.

Age

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

Gender

Both

Phase

3

Groups that have been masked

- Participant

Sample size

Target sample size: **60**

Randomization (investigator's opinion)

Randomized

Randomization description

Randomization was done by lottery method and study was single blinded they did not know in which study group they are allocated.

Blinding (investigator's opinion)

Single blinded

Blinding description

Participants were blinded in the study

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees

1

Ethics committee**Name of ethics committee**

Research and ethic / technical committee for The University of Faisalabad

Street address

University avenue faisal town canal road

City

Faisalabad

Postal code

38000

Approval date

2024-02-17, 1402/11/28

Ethics committee reference number

TUF/DR/SA/MSPT/2024/420

Health conditions studied

1

Description of health condition studied

Non specific low back pain

ICD-10 code

M54.5

ICD-10 code description

Low back pain

Primary outcomes

1

Description

Non specific low back pain

Timepoint

Before intervention or after six weeks of intervention

Method of measurement

Inclinometer

Secondary outcomes

1

Description

Functional disability

Timepoint

Before intervention and at the end of six weeks of intervention

Method of measurement

Oswestry Disability Index

Intervention groups

1

Description

Intervention group1 : muscle energy technique

Intervention group 2 : myofascial release technique

Intervention group 3 : Both these techniques were used

Category

Treatment - Devices

2

Description

Intervention group1 : muscle energy technique
Intervention group 2 : myofascial release technique
Intervention group 3 : Both these techniques were used

Category

Treatment - Devices

Recruitment centers

1

Recruitment center

Name of recruitment center

Madinah Teaching Hospital

Full name of responsible person

Amna Anwar

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Sargodha road, Faisalabad

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2

Recruitment center

Name of recruitment center

Allied Hospital Faisalabad

Full name of responsible person

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DR. Tusi road Faisalabad

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amnaaanwar262@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

The University Of Faisalabad

Full name of responsible person

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University avenue faisal town canal road

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38000

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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

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

Amna Anwar

Position

Student

Latest degree

Bachelor

Other areas of specialty/work

Physiotherapy

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Person responsible for scientific inquiries

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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

Effect of myofascial release and muscle energy
technique on quadratus lumborum in patients with non
specific low back pain

When the data will become available and for how long

Starting six months after 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

amnaaanwar262@gmail.com00923356515086

From where data/document is obtainable

amnaaanwar262@gmail.com00923356515086

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

Any applicant just need to contact for data, contact
through email at amnaanwar262@gmail.com

Comments**Person responsible for updating data****Contact****Name of organization / entity**

The University of Faisalabad

Full name of responsible person

Amna Anwar

Position

Punjab

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