

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jul 2026

Comparative Effect of Muscle Energy Technique and Ischemic Compression on Chronic Shoulder pain of Myofascial origin.

Protocol summary

Study aim

To evaluate the comparative effectiveness of ischemic compression and muscle energy technique on chronic shoulder pain and range of motion.

Design

Single blind, Parallel assigned, multicentred, randomized clinical trial on 34 participants (With 17 participants in each) with the history of rotator cuff as assessed by pain and limited range of motion and randomization is being accomplished using simple random sampling by lottery method.

Settings and conduct

District head quater hospital faisalabad. Nustrat Abdul Rauf centre for enablement.

Participants/Inclusion and exclusion criteria

Both gender with age 25 to 45 years with shoulder pain from at least 3 months, pain and Jump sign which is distinguished by patient expression, at least 3 to 7 no. of pain on visual analogue scale, unilateral or bilateral pain, subjects must be able to raise the arm above head, MRI, showing any rotator cuff tear. patient test positive for Hawkins-Kennedy test and Empty can test, no radiographic signs of bone fracture were included. Subjects having a history of past surgery, trauma history, injection, having open wounds, skin or vascular disease and sensory disturbance on shoulder, patient taking any medication from 1 month, Patient having any radiculopathy or myelopathy and fibromyalgia, infection, bursitis, capsulitis, rheumatoid arthritis, tumor, or any systemic illness of shoulder and pregnancy were excluded.

Intervention groups

Group A: The subjects will receive Ultrasound at baseline and Muscle energy technique on bicep, supraspinatus, deltoid and infraspinatus. Group B: The subjects will receive Ultrasound at baseline and Ischemic compression on bicep, supraspinatus, deltoid and infraspinatus.

Main outcome variables

Pain Range of motion Shoulder pain and disability index

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20210813052164N1**

Registration date: **2021-09-11, 1400/06/20**

Registration timing: **registered_while_recruiting**

Last update: **2021-09-11, 1400/06/20**

Update count: **0**

Registration date

2021-09-11, 1400/06/20

Registrant information

Name

Maria Naeem

Name of organization / entity

University of faisalabad

Country

Pakistan

Phone

+92 41 2421340

Email address

mariyakahloon@hotmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-05-21, 1400/02/31

Expected recruitment end date

2021-09-21, 1400/06/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparative Effect of Muscle Energy Technique and Ischemic Compression on Chronic Shoulder pain of Myofascial origin.

Public title

Effect of Muscle energy technique and Ischemic compression on triggers of shoulder

Purpose

Health service research

Inclusion/Exclusion criteria**Inclusion criteria:**

Both male and female between age 25 to 45 years were included. Subjects should have shoulder pain from at least 3 months on daily basis Pain that reproduces on palpation. Jump sign which is distinguished by patient expression and withdraw At least 3 to 7 no. of pain on visual analog scale Pain at one side or on both sides Subjects must be able to raise the arm above head Radiologist comment on MRI, showing any rotator cuff tear Patient test positive for Hawkins-Kennedy test and Empty can test No radiographic signs of glenoid or bone fracture

Exclusion criteria:

Subjects having a history of past surgery of shoulder Subjects having trauma history of shoulder Subjects having open wounds on shoulder Skin disease on the surface of shoulder muscle Sensory disturbance on the surface of shoulder Having any vascular disorder Injection on the Shoulder during the trial Patient taking any medication for myofascial syndrome from 1 month Patient having any radiculopathy or myelopathy Patients of fibromyalgia Patients having infection, bursitis, capsulitis of shoulder Patients having rheumatoid arthritis, tumor, or any systemic illness Pregnancy. Patients having any symptoms that may be increase due to neck movement.

Age

From **25 years** old to **45 years** old

Gender

Both

Phase

3

Groups that have been masked

- Participant

Sample size

Target sample size: **34**

Randomization (investigator's opinion)

Randomized

Randomization description

The randomization of the participant was accomplished by using simple random sampling by means of the lottery method.

Blinding (investigator's opinion)

Single blinded

Blinding description

The participants will not be aware of these study groups and this will be carried out by keeping them anonymous

for the study period.

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ethics and Technical Committee of The University of Faisalabad

Street address

University Town, Sargodha Road

City

Faisalabad

Postal code

38000

Approval date

2021-05-21, 1400/02/31

Ethics committee reference number

TUF/DR/SA/MSPP/2021/213-230

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

Pain and Range of Motion on Chronic Shoulder pain of Myofascial origin

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

Chronic shoulder Pain

Timepoint

Before intervention, 2 week and 4 week after intervention

Method of measurement

Visual Analogue Scale

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

Range of motion of shoulder

Timepoint

Before intervention and after intervention

Method of measurement

Goniometer for range of motion

2

Description

Disability

Timepoint

before and after intervention

Method of measurement

Shoulder pain and disability index

Intervention groups

1

Description

Intervention group: Group A : (Muscle energy Technique)

Category

Treatment - Other

2

Description

Intervention group: Group B: (Ischemic compression)

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

District Head Quarter Hospital Faisalabad

Full name of responsible person

Dr. Shaista Bano

Street address

Mall Road Faisalabad

City

Faisalabad

Postal code

38000

Phone

+92 41 9200140

Email

Umerzahid17@gmail.com

Web page address

2

Recruitment center

Name of recruitment center

Nusrat Abdul Rauf Center for Enablement

Full name of responsible person

Dr.Shahid Ahmed Heera

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Peoples Colony no.1

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Faisalabad

Postal code

38000

Phone

+92 41 8727918

Email

Umerzahid72@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Yasmin Physiotherapy Center

Full name of responsible person

Osama Ramzan

Street address

Sargodha Road, near muslim town 3, opposite to KIA motors.

City

Faisalabad

Postal code

38000

Phone

+92 41 8785675

Email

Osamaramzan@gmail.com

Web page address

http://omiphysio.com

Grant name

Grant code / Reference number

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

No

Title of funding source

yasmin physiotherapy center

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

Other

Person responsible for general inquiries

Contact

Name of organization / entity

The University of Faisalabad

Full name of responsible person

Maria Naeem

Position

Student

Latest degree

Master

Other areas of specialty/work

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

I have signed and assured the participants that the data will not be shared anywhere else other than the current research.

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

Not applicable

Data Dictionary

Not applicable

Title and more details about the data/document

The primary and secondary outcome measure data will be shared and no further details regarding patient personal information will be provided.

When the data will become available and for how long

Starting in January 2021

To whom data/document is available

For everyone regarding field

Under which criteria data/document could be used

Whoever will request for the data

From where data/document is obtainable

Through email address

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

An email stating the use of data will be appreciated.

Comments