Clinical Trial Protocol
Iranian Registry of Clinical Trials

10 Jun 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 quatar 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 recieve Ultrsaonic at baseline and Muscle energy technique on bicep,supraspinatus,deltoid and infraspinatus. Group B:The subjects will recieve Ultrsaonic 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
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Pakistan
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+92 41 2421340
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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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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
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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