

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Comparison of Muscle Energy Technique and Fascial Distortion Model in patients with shoulder joint limited mobility

Protocol summary

Study aim

To compare Muscle Energy Technique and Fascial Distortion Model in patients with shoulder joint limited mobility.

Design

Pragmatic, Parallel group, Double blind, Randomized controlled trial (RCT),

Settings and conduct

Saba Physical Therapy, Rehabilitation and sports injury clinic Lahore. Participants and outcome assessor will be blinded by the researcher.

Participants/Inclusion and exclusion criteria

INCLUSION CRITERIA Pain and functional limitations of shoulder joint in 20-60 years old patients. Limited mobility/Hypo mobility of shoulder joint in Flexion, extension, abduction, Horizontal adduction, external and internal rotation. Unremarkable medical history and no clinical or radiological findings that could explain the decrease in shoulder motion Willing to involve in study
EXCLUSION CRITERIA Upper or lower motor neuron disease Any pathological and traumatic conditions, Fractures and Dislocation Already received few sessions of Manual Therapy treatment Taking corticosteroids, analgesic or anti-inflammatory drugs.

Intervention groups

Group A: Subjects in Group A will received METs (Post isometric relaxation) towards the limited ROM of arm, find the first resistive barrier hold the position and apply the technique and find new barrier. Repeat this for 6-10 times and give three treatment sessions per week for two weeks. Group B: Subjects of group B will receive the techniques of Fascial distortion model according to the body language of the patient(Trigger bands, Continuum Distortion, cylinder Distortion,13 Herniated Trigger Point, Folding Distortions and Tectonic Fixation) in comfortable position for patient. Give three treatment sessions per week for two weeks.

Main outcome variables

Range of Motion, Pain, Function

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20200512047408N1**

Registration date: **2020-05-31, 1399/03/11**

Registration timing: **prospective**

Last update: **2020-05-31, 1399/03/11**

Update count: **0**

Registration date

2020-05-31, 1399/03/11

Registrant information

Name

Usman Ghani

Name of organization / entity

Riphah International University, Islamabad, Pakistan

Country

Pakistan

Phone

+92 40 4301029

Email address

usmanghani270@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-06-01, 1399/03/12

Expected recruitment end date

2020-07-01, 1399/04/11

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of Muscle Energy Technique and Fascial Distortion Model in patients with shoulder joint limited mobility

Public title

Comparison of Muscle Energy Technique and Fascial Distortion Model in patients with shoulder joint limited mobility

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Pain and functional limitations of shoulder joint in 20-60 years old patients. Limited mobility/Hypo mobility of shoulder joint in Flexion, extension, abduction, Horizontal adduction, external and internal rotation. Unremarkable medical history and no clinical or radiological findings that could explain the decrease in shoulder motion. Willing to involve in study

Exclusion criteria:

Upper or lower motor neuron disease. Any pathological and traumatic conditions, Fractures and Dislocation. Already received few sessions of Manual Therapy treatment. Taking corticosteroids, analgesic or anti-inflammatory drugs.

Age

From **20 years** old to **60 years** old

Gender

Both

Phase

2

Groups that have been masked

- Participant
- Outcome assessor
- Data analyser

Sample size

Target sample size: **44**

Randomization (investigator's opinion)

Randomized

Randomization description

Total forty 44 patients will be recruited in the study. The subjects will be randomly assigned to two groups A & B with each containing 22 subjects according to their selection by lottery method. There will be 44 slips marking with A on 22 slips & B on other 22 slips in the box. Each participant will be requested to randomly pick up a slip from the box. Slips which are picked by the patients will not put back in the box.

Blinding (investigator's opinion)

Double blinded

Blinding description

Participants allocated in each group will be unaware about each other that which participant receives which treatment protocol. Outcome assessor and data analyser will be blind about participants and treatment protocols.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Riphah International University, Islamabad

Street address

63B, B block BOR society Johar Town

City

Lahore

Postal code

54782

Approval date

2020-01-01, 1398/10/11

Ethics committee reference number

REC/RCRS/20/1006

Health conditions studied

1

Description of health condition studied

Shoulder joint limited mobility

ICD-10 code

M25.81

ICD-10 code description

Other specified joint disorders, shoulder

Primary outcomes

1

Description

Range of Motion

Timepoint

Before intervention and 1, 2, 6 weeks after intervention

Method of measurement

Goniometer

2

Description

Pain

Timepoint

Before intervention and 1, 2, 6 weeks after intervention

Method of measurement

Visual Analogue Scale

3

Description

Function

Timepoint

Before intervention and 1, 2, 6 weeks after intervention

Method of measurement

Constant Murley Score

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Muscle Energy Technique(Post isometric relaxation)

Category

Rehabilitation

2

Description

Intervention group: Fascial distortion model

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Saba's Physical Therapy, Rehabilitation and sports injury clinic.

Full name of responsible person

Dr Saba Rafiq

Street address

25/H Firdous Market, Gulberg III, Lahore, Pakistan

City

Lahore

Postal code

54660

Phone

+92 42 35883608

Email

saba_gull837@yahoo.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Riphah international university, Islamabad, Pakistan

Full name of responsible person

Usman Ghani

Street address

63b, B block, BOR society, Johar town, Lahore

City

Lahore

Postal code

54782

Phone

+92 40 4301029

Email

usmanghani270@gmail.com

Grant name

Grant code / Reference number

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

No

Title of funding source

Self funding

Proportion provided by this source

100

Public or private sector

Private

Domestic or foreign origin

Foreign

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

Riphah international university, islamabad, Pakistan

Full name of responsible person

Usman Ghani

Position

Student

Latest degree

Master

Other areas of specialty/work

Physiotherapy

Street address

63b, B block, BOR Society, Johar town Lahore, Pakistan

City

Lahore

Province

Punjab

Postal code

54782

Phone

+92 40 4301029

Email

usmanghani270@gmail.com

Person responsible for scientific inquiries

Contact

Name of organization / entity

Riphah international university, Islamabad, Pakistan

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City**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

There is no further information

Study Protocol

No - There is not a plan to make this available

Statistical Analysis Plan

No - There is not a plan to make this available

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

No - There is not a plan to make this available

Analytic Code

No - There is not a plan to make this available

Data Dictionary

No - There is not a plan to make this available