

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jul 2026

Effects of Maitland and Mulligan's Mobilization Technique in Treatment of Post CABG Adhesive Capsulitis

Protocol summary

Study aim

To evaluate the effectiveness of Mulligan Mobilization in patients with adhesive capsulitis.

Design

Single blind, parallel assigned, multi-centered, randomized clinical trials will be conducted on 48 participants (two groups with 24 participants each) with history of adhesive capsulitis post CABG as assessed by pain with limited activities of daily livings, and randomization is being accomplished using simple random sampling by means of lottery method.

Settings and conduct

Faisalabad Institute of Cardiology. Participants are kept anonymous for conducting the single blind trial.

Participants/Inclusion and exclusion criteria

Male and female participants of age 40 to 60 years with restricted shoulder ROM post CABG, participants presenting with pain and restricted movements of shoulder (Lateral rotation, abduction and medial rotation) and limitations in activity of daily livings were included. Participants with neurological disorders (e.g., stroke, Parkinson's disease) leading to deficiency of shoulder muscles activity, severe trauma related to painful stiff shoulder, bony changes or osteoarthritis of the affected shoulder on radiographs, previous surgeries of shoulder ,manipulation under anesthesia of the affected shoulder and prior history of any diagnosed musculoskeletal issue of shoulder (Rotator cuff tendinitis, impingent) were excluded.

Intervention groups

Group A: The baseline treatment will be ROM exercises and then we will apply Mulligan technique (Movement with mobilization). Group B: The baseline treatment for group B same as group A and then Maitland technique will be performed(Grade III mobilization).

Main outcome variables

Shoulder pain Shoulder Disability

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20210815052188N1**

Registration date: **2021-08-28, 1400/06/06**

Registration timing: **retrospective**

Last update: **2021-08-28, 1400/06/06**

Update count: **0**

Registration date

2021-08-28, 1400/06/06

Registrant information

Name

Soban Habib

Name of organization / entity

The University of Faisalabad

Country

Pakistan

Phone

+92 41 8783707

Email address

dpt-fa14-022@tuf.edu.pk

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-05-21, 1400/02/31

Expected recruitment end date

2021-08-21, 1400/05/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effects of Maitland and Mulligan's Mobilization Technique in Treatment of Post CABG Adhesive Capsulitis

Public title

Effect of mobilization techniques for post CABG adhesive capsulitis

Purpose

Health service research

Inclusion/Exclusion criteria

Inclusion criteria:

Male and female participants of age 40 to 60 years with restricted shoulder range of motion post CABG
Participants presenting with pain and restricted movements of shoulder (Lateral rotation, abduction and medial rotation) Limitations in activity of daily living

Exclusion criteria:

Neurological disorders (e.g., stroke, Parkinson's disease) leading to deficiency of shoulder muscles activity Severe trauma related to painful stiff shoulder Bony changes or osteoarthritis of the affected shoulder on radiographs
Previous surgeries of shoulder Manipulation under anesthesia of the affected shoulder Prior history of any diagnosed musculoskeletal issue of shoulder (Rotator cuff tendinitis, impingent)

Age

From **40 years** old to **60 years** old

Gender

Both

Phase

3

Groups that have been masked

- Participant

Sample size

Target sample size: **48**

Randomization (investigator's opinion)

Randomized

Randomization description

Simple randomized sampling technique was used to enroll participants into groups and they were allotted to two groups by lottery method

Blinding (investigator's opinion)

Single blinded

Blinding description

The participants will not be aware of the 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

Ethical and Technical Committee of The University of Faisalabad

Street address

P no. 64 Muslim Town B Block 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

Adhesive capsulitis

ICD-10 code

M75.0

ICD-10 code description

Adhesive capsulitis of shoulder

Primary outcomes

1

Description

Primary outcome is shoulder pain

Timepoint

Shoulder pain before intervention, after 2nd week and 4th week

Method of measurement

Visual analogue scale

Secondary outcomes

1

Description

Shoulder Disability

Timepoint

before the treatment and after 4th week of treatment

Method of measurement

Shoulder pain and disability index

Intervention groups

1

Description

Intervention group A: Mulligan mobilization and range of motion exercises

Category

Treatment - Other

2

Description

Intervention group B: Maitland mobilization and range of motion exercises

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Faisalabad Institute of Cardiology

Full name of responsible person

Dr Amir Mushtaq

Street address

P no. 64 Muslim Town B Block Sargodha Road

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Email

sobanhabib64@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Yasmin Physiotherapy Center

Full name of responsible person

Osama Ranzam

Street address

Sargodha Road. near muslim town 3, opposite KIA motors

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Phone

+92 41 8785675

Email

osamaramzan@gmail.com

Grant name

Grant code / Reference number

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

Yes

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

Yasmin Physiotherapy Center

Full name of responsible person

Osama Ramzan

Position

Clinical Physiotherapist

Latest degree

Master

Other areas of specialty/work

Physiotherapy

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Person responsible for updating data

Contact

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Full name of responsible person

Osama Ramzan

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Latest degree

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Email

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Web page address

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

As we signed and assured the participants that their data will not be shared anyway where else other than current study

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 personal information will be provided

When the data will become available and for how long

Starting in January, 2022

To whom data/document is available

For everyone regarding field

Under which criteria data/document could be used

Whoever will request for data

From where data/document is obtainable

Through email

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

An email stating the use of data will be appreciated

Comments