

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

09 Jun 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

##### City

Faisalabad

##### Postal code

38000

##### Phone

+92 41 6076222

##### 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

##### City

Faisalabad

##### Postal code

38000

##### 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

#### Street address

Sargodha Road, near Muslim town 3, Opposite KIA motors

#### City

Faisalabad

#### Province

Punjab

#### Postal code

38000

#### Phone

+92 41 8785675

#### Email

osamaramzan@gmail.com

## Person responsible for scientific 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

Orthopedics

#### Street address

Park view city, Lahore

#### City

Lahore

#### Province

Punjab

#### Postal code

54000

#### Phone

+92 42 35433053

#### Email

osamaramzan@gmail.com

#### Web page address

## Person responsible for updating data

### 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

**Street address**

Park view city, Lahore

**City**

Lahore

**Province**

Punjab

**Postal code**

54000

**Phone**

+92 42 35433053

**Email**

osamaramzan@gmail.com

**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**