Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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

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Soban Habib
Name of organization / entity
The University of Faisalabad
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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2021-05-21, 1400/02/31

Expected recruitment end date
2021-08-21, 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 Cardialogy
Full name of responsible person
Dr Amir Mushtaq
Street address
P no. 64 Muslim Town B Block Sargodha Road
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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
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Other areas of specialty/work
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Person responsible for updating data

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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 secondry 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 starting the use of data will be appreciated

Comments