Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

COMPARISON OF MULLIGAN TECHNIQUE VERSUS MUSCLE ENERGY TECHNIQUE IN PATIENTS WITH ADHESIVE CAPSULITIS

Protocol summary

Study aim
To compare the effects of Mulligan technique and muscle energy technique in patients with adhesive capsulitis.

Design
A concealed, randomized, blinded, controlled clinical trial with a parallel group design of 78 patients, enrolled between September 2019 and March 2020, and followed for one year

Settings and conduct
The list of diagnosed cases were obtained from the physiotherapy department of Government Mian Munshi Hospital, Lahore, Pakistan. Patients were randomly selected and approached by principal investigator after informed consent taken and their approval and ethical approval they were included in the study. The principal investigator was known to the type of treatment but the assessor here was kept blinded by labeling treatment A and treatment B to either group.

Participants/Inclusion and exclusion criteria
Inclusion criteria: Subject diagnosed with unilateral idiopathic adhesive capsulitis, Age: 35 - 60 years, Both gender, Subject diagnosed with stage I and stage II adhesive capsulitis. Exclusion criteria: History of rotator cuff tear, History of rheumatoid arthritis, History of Malignancies in shoulder region, History of any neurological disorder, History of Thoracic outlet syndrome, History of Peripheral nerve injuries.

Intervention groups
Group A: received the routine physical therapy and mulligan technique Group B: received the routine physical therapy and muscle energy technique.

Main outcome variables
Pain, Range of Motion, Functional Disability

General information

Reason for update
Acronym
IRCT registration information

IRCT registration number: **IRCT20200605047660N1**
Registration date: **2020-06-08, 1399/03/19**
Registration timing: **retrospective**

Last update: **2020-06-08, 1399/03/19**
Update count: **0**

Registration date
2020-06-08, 1399/03/19

Registrant information
Name
Rabia Khalil
Name of organization / entity
Health
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Pakistan
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+92 42 92001143
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rabiakhalil98@gmail.com

Recruitment status
Recruitment complete
Funding source

Expected recruitment start date
2019-09-01, 1398/06/10
Expected recruitment end date
2020-03-31, 1399/01/12
Actual recruitment start date
2019-09-01, 1398/06/10
Actual recruitment end date
2020-03-31, 1399/01/12
Trial completion date
2020-03-31, 1399/01/12

Scientific title
COMPARISON OF MULLIGAN TECHNIQUE VERSUS MUSCLE ENERGY TECHNIQUE IN PATIENTS WITH ADHESIVE CAPSULITIS

Public title
COMPARISON OF MULLIGAN TECHNIQUE VERSUS MUSCLE ENERGY TECHNIQUE IN PATIENTS WITH ADHESIVE CAPSULITIS
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
Subject diagnosed with unilateral idiopathic adhesive capsulitis Age: 35 - 60 years Both gender Subject diagnosed with stage I and stage II adhesive capsulitis.
Exclusion criteria:
History of rotator cuff tear History of rheumatoid arthritis History of malignancies in shoulder region History of any neurological disorder History of thoracic outlet syndrome History of peripheral nerve injuries
Age
From **35 years** old to **60 years** old
Gender
Both

Phase
N/A
Groups that have been masked

- Outcome assessor

Sample size
Target sample size: **78**
Actual sample size reached: **78**
Randomization (investigator's opinion)
Randomized
Randomization description
Lottery method
Blinding (investigator's opinion)
Single blinded
Blinding description
The assessor was blinded as the treatment groups were named as group A or group B. Assessor was not aware about group A and group B
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Institutional Review Board of University Institute of Physical Therapy, The University of Lahore
Street address
1 Km Off Raiwind Road, Lahore
City
Lahore
Postal code
54792
Approval date
2019-08-29, 1398/06/07
Ethics committee reference number
IRB-UOL-FAHS/668/2019

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
Pain
Timepoint
Before intervention and 3, 6 weeks after intervention
Method of measurement
Visual Analogue Scale

2

Description
Range of Motion
Timepoint
Before intervention and 3, 6 weeks after intervention
Method of measurement
Universal Goniometer

3

Description
Functional Disability
Timepoint
Before intervention and 3, 6 weeks after intervention
Method of measurement
The Shoulder Pain and Disability Index

Secondary outcomes

empty

Intervention groups

1

Description
Intervention Group– Routine Physical Therapy + Mulligan Technique 40 minutes of session, Alternative three days/ week for 6 weeks.
Category
Rehabilitation

2

Description
Control Group– Routine Physical Therapy + Muscle Energy Technique 40 minutes of session, Alternative three days/ week for 6 weeks.
Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
Government Mian Munshi Hospital, Lahore, Pakistan
Full name of responsible person
Muhammad Yousaf Rabbani
Street address
Sagian Wala Bypass, Data Gunj Buksh Town, Lahore.
City
Lahore
Postal code
54000
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+92 42 37147265
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sd.health@punjab.gov.pk

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
University of Lahore, Lahore
Full name of responsible person
Dr Fahad Tanveer
Street address
1 Km Off Raiwind Road, Lahore
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+92 42 35963424
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fahad.tanveer@uipt.uol.edu.pk
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
University of Lahore, Lahore
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
Academic

Person responsible for general inquiries

Contact
Name of organization / entity
Government Mian Munshi Hospital, Lahore, Pakistan
Full name of responsible person
Dr Rabia Khalil
Position
Physiotherapist
Latest degree
Master
Other areas of specialty/work
Physiotherapy
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Sagian Wala Bypass, Data Gunj Buksh Town, Lahore, Punjab , Pakistan
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Person responsible for updating data

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Government Mian Munshi Hospital, Lahore, Pakistan

Full name of responsible person
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Position
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Latest degree
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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is a plan to make this available

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
Yes - There is a plan to make this available

Data Dictionary
Yes - There is a plan to make this available

Title and more details about the data/document
IPD collected for the primary outcome measure only

When the data will become available and for how long
after publication of the study

To whom data/document is available
people working in academic institutions and researchers

Under which criteria data/document could be used
on informed request from the investigator

From where data/document is obtainable
via email / telephonic contact with investigator

What processes are involved for a request to access data/document
on email request data will be provided within week

Comments