Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Comparative effects of Spencer Muscle Energy Technique and Bowen Therapy on Pain, Range of motion and Disability in Patients with Adhesive Capsulitis

Protocol summary

Study aim
To compare the effects of Spencer muscle energy techniques and Bowen therapy on pain, Range of motion and disability in patients with Adhesive capsulitis.

Design
Single blinded randomized clinical trial with parallel assignment of 32 participants to two groups equally.

Settings and conduct
The study will be conducted at Arif memorial teaching hospital. Outcome assessor will be kept blind in it.

Participants/Inclusion and exclusion criteria
Inclusion Criteria: Both male and female patients between age of 40 - 60 years. Patients with positive capsular pattern. Patients experiencing pain, stiffness, and limited range of motion in the affected shoulder. Patients who have not undergone shoulder surgery or received corticosteroid injections in the past three months. Exclusion Criteria: Patients with a history of shoulder fractures, dislocations, or other significant shoulder injuries. Patients with fracture in and around shoulder. Patients with any neurological disorder

Intervention groups
Group A: Spencer muscle energy technique Group B: Bowen Therapy

Main outcome variables
Pain measured by numeric pain rating scale ROM measured by universal goniometer Disability measured by shoulder pain and disability index Questionnaire

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20220701055331N3**
Registration date: **2024-06-13, 1403/03/24**
Registration timing: **prospective**
Last update: **2024-06-13, 1403/03/24**
Update count: **0**

Registration date
2024-06-13, 1403/03/24

Registrant information

Name
Ifra Zulqarnain Awan

Name of organization / entity
Rashid Latif Medical College

Country
Pakistan

Phone
+92 333 4975431

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ifra.awan@rlmc.edu.pk

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2024-06-25, 1403/04/05

Expected recruitment end date
2024-11-25, 1403/09/05

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Comparative effects of Spencer Muscle Energy Technique and Bowen Therapy on Pain, Range of motion and Disability in Patients with Adhesive Capsulitis

Public title
Comparative effects of Spencer Muscle Energy Technique and Bowen Therapy on Pain, Range of motion

and Disability in Patients with Adhesive Capsulitis

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Both male and female patients between age of 40 - 60 years. Patients with positive capsular pattern Patients experiencing pain, stiffness, and limited range of motion in the affected shoulder. Patients who have not undergone shoulder surgery or received corticosteroid injections in the past three months.

Exclusion criteria:

Patients with a history of shoulder fractures, dislocations, or other significant shoulder injuries Patients with any neurological disorder Patients with fracture in and around shoulder

Age

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

Gender

Both

Phase

N/A

Groups that have been masked

- Outcome assessor

Sample size

Target sample size: **32**

Randomization (investigator's opinion)

Randomized

Randomization description

Randomization will be done by random computer number generator. Assign unique identification numbers to participants, then use a reliable software tool to generate a list of random numbers. Match these numbers to participant IDs and allocate individuals to different study groups based on the sorted random numbers. Ensure that the randomization process is concealed and documented for transparency and integrity.

Blinding (investigator's opinion)

Single blinded

Blinding description

This will be a Single blinded study. It involves keeping the outcome assessor blind to the intervention received by the participants. This helps to minimize bias in assessing the study outcomes. To achieve single blinding, the outcome assessor is not informed about the treatment allocation of the participants and remains unaware of which group received the intervention being studied.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Institutional Review Board of Rashid Latif Medical College, Lahore.

Street address

35-KM Ferozepur Road Lahore

City

Lahore

Postal code

54600

Approval date

2023-12-28, 1402/10/07

Ethics committee reference number

IRB/2023/138

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 4 weeks after intervention

Method of measurement

Numeric pain rating scale

2

Description

Range of motion

Timepoint

Before intervention and 4 weeks after intervention

Method of measurement

Universal Goniometer

3

Description

Disability

Timepoint

Before intervention and 4 weeks after intervention

Method of measurement

Shoulder pain and disability index questionnaire

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group A: Spencer muscle energy technique: Patients of group A received Spencer muscle energy technique 3 times a week for 4 weeks.
Category
Rehabilitation

2

Description
Intervention group B: Participants of group B received Bowen therapy 3 times a week for 4 weeks
Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
Arif Memorial Teaching Hospital
Full name of responsible person
Dr. Ifra Zulqarnain Awan
Street address
35-km ferozepur road Lahore
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Rashid Latif Medical College
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Dr. Ifra Zulqarnain Awan
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Email
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Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Rashid Latif Medical College
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
Rashid Latif Medical College
Full name of responsible person
Umm-ul-wara
Position
Physiotherapist
Latest degree
Bachelor
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Undecided - It is not yet known if there will be a plan to make this available
Study Protocol
Undecided - It is not yet known if there will be a plan to make this available
Statistical Analysis Plan
Undecided - It is not yet known if there will be a plan to make this available
Informed Consent Form
Undecided - It is not yet known if there will be a plan to make this available
Clinical Study Report
Undecided - It is not yet known if there will be a plan to make this available
Analytic Code
Undecided - It is not yet known if there will be a plan to make this available
Data Dictionary
Undecided - It is not yet known if there will be a plan to make this available