

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 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

###### Email address

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

##### City

Lahore

##### Postal code

54600

##### Phone

+92 333 4975431

##### Email

ifra.awan@rlmc.edu.pk

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Rashid Latif Medical College

##### Full name of responsible person

Dr. Ifra Zulqarnain Awan

##### Street address

35-km ferozepur road Lahore

##### City

Lahore

##### Postal code

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+92 333 4975431

##### Email

ifra.awan@rlmc.edu.pk

##### 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

##### Other areas of specialty/work

Physiotherapy

##### Street address

Rashid Latif Medical College 35-km Ferozpur Road  
Lahore

##### City

Lahore

##### Province

Punjab

##### Postal code

54600

##### Phone

+92 333 4975431

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##### Email

ifra.awan@rlmc.edu.pk

## Person responsible for scientific inquiries

#### Contact

##### Name of organization / entity

Rashid Latif Medical College

##### Full name of responsible person

Dr. Ifra Zulqarnain Awan

##### Position

Lecturer/Physiotherapist

##### Latest degree

Master

##### Other areas of specialty/work

Physiotherapy

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**Person responsible for updating data****Contact****Name of organization / entity**

Rashid Latif Medical College

**Full name of responsible person**

Dr. Ifra Zulqarnain Awan

**Position**

Lecturer/Physiotherapist

**Latest degree**

Master

**Other areas of specialty/work**

Physiotherapy

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Lahore

**City**

Lahore

**Province**

Punjab

**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