

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jul 2026

EFFECTS OF ACTIVE RELEASE TECHNIQUE ON SCAPULAR DYSKINESIA, PAIN, RANGE OF MOTION AND FUNCTIONAL LIMITATIONS IN PATIENTS WITH REPETITIVE SHOULDER INJURIES

Protocol summary

Study aim

The objectives of this study are to investigate the effects of the Active Release Technique on correcting scapular dyskinesia, reducing pain, improving shoulder and scapular range of motion, and decreasing functional limitations in patients with repetitive shoulder injuries.

Design

Parallel Group Randomized Controlled Trail

Settings and conduct

Settings: -Allied Hospital Faisalabad -Madina Teaching Hospital, Faisalabad -Mujahid Hospital, Faisalabad
Conduct: Single-blinded study (only patient will be blinded of treatment groups)

Participants/Inclusion and exclusion criteria

Inclusion Criteria • Male and females aged 20 to 40 years
• Patients who had scapular dyskinesia positive by Modified SAT and LSST • Patient who had pain score of 4 or more on NPRS scale • Patients who had pain, impaired ROM, and functional limitation secondary to repetitive shoulder injuries • Patients who were willing to participate and filled in the informed consent provided by the study protocol
Exclusion Criteria • Individuals with significant comorbidities affecting treatment, such as severe cardiovascular disease or neuromuscular disorders, shoulder dislocation, active infection, arthritis, fracture, dislocation/subluxation were excluded • Patient who had neurological injuries such as Long Thoracic Nerve Injury • Patients who had acute shoulder surgeries and winged scapula were excluded due to variations in recovery

Intervention groups

Group A (Interventional Group) will receive active release technique on tight muscles of scapula and baseline treatment
Group B (Control Group) will receive only baseline treatment (MWM Scapular Mobilization, Scapular Correction Exercises and Heating modality)

Main outcome variables

Scapular Dyskinesia Pain Range of Motion Functional Limitation

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20240416061502N1**

Registration date: **2024-05-05, 1403/02/16**

Registration timing: **retrospective**

Last update: **2024-05-05, 1403/02/16**

Update count: **0**

Registration date

2024-05-05, 1403/02/16

Registrant information

Name

Lyba Musaddiq

Name of organization / entity

The University of Faisalabad

Country

Pakistan

Phone

+92 41 8542452

Email address

2022-ms-pt-028@tuf.edu.pk

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2024-02-06, 1402/11/17

Expected recruitment end date

2024-04-26, 1403/02/07

Actual recruitment start date

2024-02-12, 1402/11/23

Actual recruitment end date
2024-04-30, 1403/02/11

Trial completion date
2024-04-30, 1403/02/11

Scientific title
EFFECTS OF ACTIVE RELEASE TECHNIQUE ON SCAPULAR DYSKINESIA, PAIN, RANGE OF MOTION AND FUNCTIONAL LIMITATIONS IN PATIENTS WITH REPETITIVE SHOULDER INJURIES

Public title
Active Release Technique on Scapular Dyskinesia in Patients with Repetitive Shoulder Injuries

Purpose
Treatment

Inclusion/Exclusion criteria
Inclusion criteria:
Male and female aged 20 to 40 years Patients who had scapular dyskinesia positive by Modified SAT and LSST Patients who had pain score of 4 or more on the NPRS scale Patients who had pain, impaired ROM, and functional limitation secondary to repetitive shoulder injuries Patients who were willing to participate and filled the informed consent provided by the study protocol
Exclusion criteria:
Individuals with significant comorbidities affecting treatment, such as severe cardiovascular disease or neuromuscular disorders, shoulder dislocation, active infection, arthritis, fracture, and dislocation/subluxation were excluded Patients who had neurological injury such as Long Thoracic Nerve Injury Patients who had acute shoulder surgeries and winged scapula were excluded due to variations in recovery.

Age
From **20 years** old to **40 years** old

Gender
Both

Phase
N/A

Groups that have been masked

- Participant

Sample size
Target sample size: **24**
Actual sample size reached: **24**

Randomization (investigator's opinion)
Randomized

Randomization description
Convenient Sampling Randomization/ an Individual unit was assigned to one of the groups/ The tools used were the Chit and Draw method, thoroughly mixed and randomly drawn, the resulting sequence was random. Allocation concealment of participants.

Blinding (investigator's opinion)
Single blinded

Blinding description
Participants were blinded in my study until the cessation of treatment sessions

Placebo
Not used

Assignment

Parallel

Other design features

Secondary Ids
empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethical Committee of The University of Faisalabad
Street address
West Canal Road, Faisalabad-37610
City
Faisalabad
Postal code
38000
Approval date
2024-02-17, 1402/11/28
Ethics committee reference number
TUF/DR/SA/MSPP/2024/394

Health conditions studied

1

Description of health condition studied
Scapular Dyskinesia
ICD-10 code
M75.82
ICD-10 code description
Other shoulder lesions, left shoulder

2

Description of health condition studied
Repetitive Shoulder Injuries
ICD-10 code
M75.9
ICD-10 code description
Shoulder lesion, unspecified

Primary outcomes

1

Description
Scapular Dyskinesia
Timepoint
before intervention and at 2 weeks after intervention (6 sessions total)
Method of measurement
Ruler

2

Description
Pain
Timepoint

before intervention and at 2 weeks after intervention (6 sessions total)

Method of measurement

NPRS Scale

3

Description

Shoulder and Scapular Range of Motion

Timepoint

before intervention and at 2 weeks after intervention (6 sessions total)

Method of measurement

Goniometer and Digital Inclinator

Secondary outcomes

1

Description

Functional Limitation

Timepoint

before intervention and at 2 weeks after intervention (6 sessions total)

Method of measurement

SPADI Questionnaire

Intervention groups

1

Description

Intervention group: Active Release Technique and Baseline Treatment (MWM Mobilization, Scapular Correction Exercises, Heating Modality)

Category

Rehabilitation

2

Description

Control group: Baseline Treatment (MWM Mobilization, Scapular Correction Exercises, Heating Modality)

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Madinah Teaching Hospital

Full name of responsible person

Dr. Kishwar Batool

Street address

25-W-8 Madina Town Faisalabad

City

Faisalabad

Postal code

38000

Phone

+92 322 6380789

Email

2022-ms-pt-028@tuf.edu.pk

2

Recruitment center

Name of recruitment center

Allied Hospital

Full name of responsible person

Dr. Mariam Mehmood

Street address

25-W-8 Madina Town Faisalabad

City

Faisalabad

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Phone

+92 322 6380789

Email

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3

Recruitment center

Name of recruitment center

Mujahid Hospital, Faisalabad

Full name of responsible person

Dr. Aemen Abid

Street address

25-W-8 Madina Town, Faisalabad

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

The University of Faisalabad

Full name of responsible person

Lyba Musaddiq

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Grant name

Grant code / Reference number

Is the source of funding the same sponsor

organization/entity?

No

Title of funding source

Madinah Teaching Hospital

Proportion provided by this source

100

Public or private sector

Public

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**

The University of Faisalabad, Pakistan

Full name of responsible person

Lyba Musaddiq

Position

Physiotherapist

Latest degree

Master

Other areas of specialty/work

Physiotherapy

Street address

25-W-8, Madina Town, Faisalabad

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Person responsible for scientific inquiries**Contact****Name of organization / entity**

The University of Faisalabad, Pakistan

Full name of responsible person

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

The University of Faisalabad

Full name of responsible person

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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

Not applicable

Analytic Code

Not applicable

Data Dictionary

Not applicable