

Clinical Trial Protocol

Iranian Registry of Clinical Trials

11 Sep 2026

Effects of grade III stretch gliding with and without scapulothoracic exercises in frozen shoulder patients

Protocol summary

Study aim

The purpose of the study was to compare the Effects of Grade III Stretch Gliding with and without Scapulothoracic exercises in frozen shoulder patients

Design

A concealed, Randomized , single blinded, controlled trial with a group design of 80 patients

Settings and conduct

Study was conducted at: 1. Muhammad physical therapy clinic and rehabilitation center, Multan. 2. Faiz hospital, Multan.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Age 40-60 In comparison to other shoulder, the range of motion in abduction, flexion, and external rotation less than 50%. Both gender (male/female) Unilateral/bilateral shoulder Limited ADLS (washing hair, placing an object on a high place, touching the back of the neck, etc.) Must be in the frozen stage (second Stage) Exclusion criteria: History of Trauma Malignancy Cerebrovascular accidents and neurological conditions affecting the shoulder Patients with mastectomy Fracture of shoulder

Intervention groups

The exercise regime was distributed over 6 weeks period (24 sessions) once a day and 4 times per week. Group-A received a treatment program consisting of grade III stretch gliding along with scapulothoracic exercises). Group-B received grade III stretch gliding only. Both groups received a heating pad for 10-15 minutes. In addition, patients followed the home exercise program which included (wall creep, pendulum exercises) and functional activities (e.g., combing hair, brushing teeth, etc.) at home twice daily with 20 repetitions.

Main outcome variables

Pain, range of motion and functional status

General information

Reason for update

Acronym

FS

IRCT registration information

IRCT registration number: **IRCT20220530055020N1**

Registration date: **2022-06-07, 1401/03/17**

Registration timing: **retrospective**

Last update: **2022-06-07, 1401/03/17**

Update count: **0**

Registration date

2022-06-07, 1401/03/17

Registrant information

Name

Muhammad Uman

Name of organization / entity

Muhammad Institute of Medical and Allied Sciences, Multan

Country

Pakistan

Phone

+92 306 7496018

Email address

muhammaduman@mimas.edu.pk

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-11-15, 1400/08/24

Expected recruitment end date

2021-12-15, 1400/09/24

Actual recruitment start date

2021-11-15, 1400/08/24

Actual recruitment end date

2021-12-20, 1400/09/29

Trial completion date

2022-02-02, 1400/11/13

Scientific title

Effects of grade III stretch gliding with and without scapulothoracic exercises in frozen shoulder patients

Public title

grade III stretch gliding with and without scapulothoracic exercises in frozen shoulder patients

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Age 40-60 Both gender Unilateral/bilateral shoulder Limited ADLs Must be in frozen stage (second stage) In comparison to other shoulder the ROM in abduction, flexion and external rotation less than 50%

Exclusion criteria:

History of trauma Malignancy Patient with mastectomy Fracture of shoulder CVA and neurological condition affecting shoulder

Age

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

Gender

Both

Phase

1-2

Groups that have been masked

- Data analyser

Sample size

Target sample size: **80**

More than 1 sample in each individual

Number of samples in each individual: **2**
before and after treatment

Actual sample size reached: **80**

More than 1 sample in each individual

Actual sample size in each individual: **40**
before and after treatment

Randomization (investigator's opinion)

Randomized

Randomization description

Allocation concealment occurs and patients will be recruited by using simple randomization through the lottery method. Lottery method carried out through sealed envelopes, Each participants will randomly chose the sealed envelope and open this sealed envelop.

Blinding (investigator's opinion)

Single blinded

Blinding description

Data analyzer was unaware of the results. Data analyzer was unaware of the treatments received by group-A and group-B. Data analyzer was blinded to the results.

Placebo

Not used

Assignment

Parallel

Other design features

No

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

The Institutional Ethical Committee of Muhammad Institute of Medical and Allied Sciences, Multan st

Street address

HLB street, Sabzazar metro station, Bosan road, Multan, Pakistan

City

Multan

Postal code

60700

Approval date

2021-11-10, 1400/08/19

Ethics committee reference number

2021/IRB/9/PT/20

Health conditions studied

1

Description of health condition studied

frozen shoulder

ICD-10 code

M75.0

ICD-10 code description

Adhesive capsulitis of shoulder

Primary outcomes

1

Description

Pain

Timepoint

before and after treatment (6 weeks)

Method of measurement

Numerical pain rating scale (NPRS)

2

Description

Range of motion

Timepoint

before and after treatment (6 weeks)

Method of measurement

Goniometer

3

Description

Functional disability

Timepoint

before and after treatment (6 weeks)

Method of measurement

Shoulder Pain and Disability Index (SPADI)

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: group-A will be treated with grade III stretch glide with scapulothoracic exercises. The scapulothoracic exercises are scapular elevation, scapular retraction with thera ball, scapular extension with thera ball, scapular stabilization with exercise ball in an upright standing position, wall, table and floor push-ups. group-A will also received heating pad for 10-15 minutes. Home exercise plan is also given. The duration of treatment is 6 weeks. The frequency of treatment is 4 times a week and each session lasted 40 minutes.

Category

Treatment - Other

2

Description

Control group: group-B will be treated with grade III stretch glide only. Group-B also received heating pad for 10-15 minutes. The duration of treatment is 6 weeks. Home exercise plan is also given. The frequency of treatment is 4 times a week and each session lasted 40 minutes

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Muhammad physical therapy clinic and rehabilitation center, Multan

Full name of responsible person

Humera Tahir

Street address

HBL street, near Sbzazar metro station, Bosan road, Multan, Pakistan.

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uman4050@gmail.com

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2

Recruitment center

Name of recruitment center

Faiz Hospital, Multan.

Full name of responsible person

Nimra Arif

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HBL street, near Sbzazar metro station, Bosan road, Multan, Pakistan.

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Muhammad Institute of Medical and Allied Sciences, Multan.

Full name of responsible person

Zahid Manzoor

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HBL street, near Sbzazar metro station, Bosan road, Multan.

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uman4050@gmail.com

Web page address

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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

Muhammad Institute of Medical and Allied Sciences, Multan.

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

Muhammad Institute of Medical and Allied Sciences,
Multan.

Full name of responsible person

Dr.Zahid Manzoor

Position

Professor

Latest degree

Ph.D.

Other areas of specialty/work

Medical Pharmacy

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

Muhammad Institute of Medical and Allied Sciences,
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Full name of responsible person

Humera Tahir

Position

Professor, Consultant

Latest degree

Medical doctor

Other areas of specialty/work

Physiotherapy

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

Muhammad Institute of Medical and Allied Sciences,
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Full name of responsible person

Humera Tahir

Position

Professor

Latest degree

Medical doctor

Other areas of specialty/work

Physiotherapy

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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