Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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

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+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 then 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
HBL 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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2

Recruitment center
Name of recruitment center
Faiz Hospital, Multan.
Full name of responsible person
Nimra Arif
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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
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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

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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