

Clinical Trial Protocol

Iranian Registry of Clinical Trials

11 Sep 2026

Effects of stretching and strengthening exercises with and without manual therapy on scapular range of motion, function and pain in individuals with shoulder impingement.

Protocol summary

Study aim

The purpose of this research is to evaluate the effects of stretching and strengthening exercises with and without manual therapy on scapular range of motion, function and pain on individuals with shoulder impingement syndrome.

Design

Randomized, superiority, parallel group trial with blinded outcome assessment. Randomization was centralized and computerized with concealed randomization sequence carried out at an external site.

Settings and conduct

participants, healthcare providers (Physicians, nurses, etc.) who care for participants during the trial, data collectors, outcome assessors, and with lessor importance Data Safety and Monitoring Board and manuscript writers

Participants/Inclusion and exclusion criteria

INCLUSION CRITERIA □ Patients of 25-50 years □ Both male and female participants will be included. □ Participants with history of non-traumatic onset of shoulder pain □ Positive painful arc during active elevation of arm □ 1 or more positive SIS tests (Hawkins-Kennedy, jobe, Neer) or □ Participants having pain during passive or isometric resisted external rotation of the arm at 90 degree of abduction. □ Pain with palpation of rotator cuff tendons. □ On visual Examination 150 degree of arm elevation as determined
Exclusion Criteria: □ History of clavicle, humerus or scapular fracture and rotator cuff surgery □ Numbness or tingling of the upper limb that is reproduced by cervical compression test; □ A positive sulcus or apprehension test □ A positive drop arm test □ A systematic illness □ A corticosteroid injection within 3 months prior to intervention □ Physical therapy within 6 months prior to intervention

Intervention groups

Group A : Exercise with manual therapy group Group B:

Exercise group alone

Main outcome variables

Quick Dash Questionnaire Numeric Pain rating scale
Goniometer

General information

Reason for update

Acronym

stretching and strengthening exercises with and without manual therapy comparison shoulder impingement

IRCT registration information

IRCT registration number: **IRCT20210205050249N1**

Registration date: **2021-02-07, 1399/11/19**

Registration timing: **registered_while_recruiting**

Last update: **2021-02-07, 1399/11/19**

Update count: **0**

Registration date

2021-02-07, 1399/11/19

Registrant information

Name

Sana Tauqeer

Name of organization / entity

Kanaan Physiotherapy and Spine Clinic

Country

Pakistan

Phone

+92 42 35470418

Email address

360physioclinic1@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-01-03, 1399/10/14

Expected recruitment end date

2021-06-03, 1400/03/13

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effects of stretching and strengthening exercises with and without manual therapy on scapular range of motion, function and pain in individuals with shoulder impingement.

Public title

Effects of stretching and strengthening exercises with and without manual therapy on scapular range of motion, function and pain in individuals with shoulder impingement.

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Participants with history of non-traumatic onset of shoulder pain Participants havig.Positive painful arc during active elevation of arm,1 or more positive SIS tests (Hawkins-Kennedy, jobe, Neer) or Participants having pain during passive or isometric resisted external rotation of the arm at 90 degree of abduction or Pain with palpation of rotator cuff tendons. On visual Examination 150 degree of arm elevation as determined

Exclusion criteria:

•History of clavicle, humerus or scapular fracture and rotator cuff surgery• Numbness or tingling of the upper limb that is reproduced by cervical compression test;• A positive sulcus or apprehension test• A positive drop arm test• A systematic illness

AgeFrom **25 years** old to **50 years** old**Gender**

Both

Phase

N/A

Groups that have been masked

- Outcome assessor

Sample sizeTarget sample size: **32****Randomization (investigator's opinion)**

Randomized

Randomization description

Patients will be randomly allocated in two groups by lottery method. Individuals will randomly assigned to 1of 2 groups. Those treated exclusively with exercises and those treated exclusively with the same exercises supplemented with manual therapy.

Blinding (investigator's opinion)

Single blinded

Blinding description

Participant Blind: Data safety will be ensured by giving specific safety numbers

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

secretary ethical review committee, Riphah College of Rehabilitation and Allied Health Sciences

Street address

28-M, Quaid-e-Azam Industrial Estate, Kot Lakhpat, Lahore

City

Lahore

Postal code

54000

Approval date

2020-03-27, 1399/01/08

Ethics committee reference number

REC/RCRS/20/1059

Health conditions studied**1****Description of health condition studied**

Shoulder Impingement Syndrome

ICD-10 code

M75.4

ICD-10 code description

Impingement Syndrome of shoulder

Primary outcomes**1****Description**

Pain

Timepoint

Before intervention and weeks after intervention

Method of measurement

Numeric Pain Rating Scale

2**Description**

Function

Timepoint

Before intervention and 4 weeks after intervention

Method of measurement

quick Dash

3

Description

Scapular Range of Motion

Timepoint

Before Intervention and 4 weeks after intervention

Method of measurement

Goniometer

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Stretching and strengthening exercises with manual therapy

Category

Treatment - Other

2

Description

Intervention group: Stretching and Strengthening Exercises without manual therapy

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Kanaan Physiotherapy and spine Clinic

Full name of responsible person

Dr. Naveed Anwar

Street address

Kanaan Physiotherapy & Spine Clinic Shahrah-e-Aiwan-e-tijarat, Lahore

City

Lahore

Postal code

54000

Phone

Email

kanaanclinic@yahoo.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Riphah International University Lahore, Pakistan.

Full name of responsible person

Dr. Naveed Anwar

Street address

28-M, Quaid-e-Azam Industrial Estate, Kot Lakhpat,

Lahore

City

Lahore

Postal code

54000

Phone

+92 42 35126110

Email

naveed.anwer@riphah.edu.pk

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Riphah International University Lahore, Pakistan.

Proportion provided by this source

20

Public or private sector

Private

Domestic or foreign origin

Foreign

Category of foreign source of funding

Sponsor: country of origin

Country of origin

PK

Type of organization providing the funding

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

Riphah International University Lahore, Pakistan.

Full name of responsible person

Dr. Naveed Anwar

Position

Assistant Professor

Latest degree

Ph.D.

Other areas of specialty/work

Physiotherapy

Street address

28-M, Quaid-e-Azam Industrial Estate, Kot Lakhpat, Lahore

City

Lahore

Province

Punjab

Postal code

54000

Phone

+92 42 35126110

Email

naveed.anwer@riphah.edu.pk

Person responsible for scientific inquiries

Contact

Name of organization / entity

Riphah International University Lahore, Pakistan.

Full name of responsible person

Dr. Naveed Anwar

Position

Associate Professor

Latest degree

Ph.D.

Other areas of specialty/work

Physiotherapy

Street address

28-M, Quaid-e-Azam Industrial Estate, Kot Lakhpat,
Lahore

City

Lahore

Province

Punjab

Postal code

54000

Phone

+92 42 35126110

Email

naveed.anwer@riphah.edu.pk

28-M, Quaid-e-Azam Industrial Estate, Kot Lakhpat,
Lahore

City

Lahore

Province

Punjab

Postal code

54000

Phone

+92 42 35126110

Email

360physioclinic1@gmail.com

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

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

Riphah International University Lahore, Pakistan.

Full name of responsible person

Sana Tauqeer

Position

Student

Latest degree

Bachelor

Other areas of specialty/work

Physiotherapy

Street address