

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jul 2026

Longitudinal effects of Myofascial release with and without 8-Week Corrective exercise in correcting Upper Cross Syndrome.

Protocol summary

Study aim

To find the longitudinal effects of myofascial release with and without 8-Week Corrective exercise in correcting Upper Cross Syndrome.

Design

This study will be Randomized Controlled trial.

Settings and conduct

Shapes, Maxrehab, Lahore

Participants/Inclusion and exclusion criteria

INCLUSION Subjects between 18-28 years old male/female Rounded shoulder angle $>52^\circ$ Forward head posture/ Cranio-vertebral angle $\leq 50^\circ$ **EXCLUSION** Patients will be excluded if they will exhibit; History of a shoulder surgery within the previous year. Joint diseases in the spine and shoulder. Not participating in two consecutive training sessions. Any red flags (tumor, fracture, metabolic diseases, rheumatoid arthritis, osteoporosis, resting blood pressure greater than 140/90 mm hg, prolonged history of steroids use, etc.) Having lower crossed syndrome. Having various upper extremity and /or problems (fracture history, tumor) cognitive problems.

Intervention groups

GROUP A (Myofascial Release) For MFR therapy, the "cross-hand release" technique will be used. Collagen bands need about 90-120 sec to be released, at least 90 sec will be required for cross-hand release. Accordingly, MFR therapy will be applied twice each time for 90 seconds on the determined areas. With seven minutes of hot pack at upper back and anterior chest and patient education about faulty posture as baseline treatment. **GROUP - B (myofascial release with 8-Week corrective exercise)** Group B will perform corrective exercises plus MFR therapy for 8 weeks (3 sessions per week and each session for 60 min) under the direct supervision of the therapist. For CE+MFR group, training protocol included four parts of warming up, MFR therapy, main exercises, and cooling down and baseline treatment.

Main outcome variables

Functional performance: Neck disability index (NDI) Pain: Numeric pain rating scale (NPRS) Angle through Photogrammetry method

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20200512047409N1**

Registration date: **2020-06-12, 1399/03/23**

Registration timing: **registered_while_recruiting**

Last update: **2020-06-12, 1399/03/23**

Update count: **0**

Registration date

2020-06-12, 1399/03/23

Registrant information

Name

Komal Ahmed

Name of organization / entity

Riphah College of Rehabilitation & Allied health Sciences

Country

Pakistan

Phone

+92 42 35713306

Email address

ahmed.komal@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-06-01, 1399/03/12

Expected recruitment end date

2020-07-01, 1399/04/11

Actual recruitment start date

empty
Actual recruitment end date
empty
Trial completion date
empty

Scientific title

Longitudinal effects of Myofascial release with and without 8-Week Corrective exercise in correcting Upper Cross Syndrome.

Public title

Longitudinal effects of Myofascial release with and without 8-Week Corrective exercise in correcting Upper Cross Syndrome.

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Subjects between 18-28 years old male/female Rounded shoulder angle $>52^\circ$ Forward head posture/ Cranio-vertebral angle $\leq 50^\circ$

Exclusion criteria:

History of a shoulder surgery within the previous year. Joint diseases in the spine and shoulder. Not participating in two consecutive training sessions. Any red flags (tumor, fracture, metabolic diseases, rheumatoid arthritis, osteoporosis, resting blood pressure greater than 140/90 mm hg, prolonged history of steroids use, etc.) Having lower crossed syndrome. Having various upper extremity and /or problems (fracture history, tumor) cognitive problems

Age

From **18 years** old to **28 years** old

Gender

Both

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: **24**

Randomization (investigator's opinion)

Randomized

Randomization description

Randomization by lottery method. Allocation concealment through sealed envelope.

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Non-probability convenient sampling technique will be used to recruit the individuals for the study and then randomization will be done by lottery method to divide the individuals into 2 treatment groups. sealed envelope will be used for allocation concealment.

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Riphah College of Rehabilitation & Allied health Sciences

Street address

Madar-e-Millat Road, Quaid-e-Azam Industrial Estate
Quaid e Azam Industrial Estate, Lahore, Punjab

City

Lahore

Postal code

54770

Approval date

2020-01-01, 1398/10/11

Ethics committee reference number

REC/RCRS/20/1007

Health conditions studied

1

Description of health condition studied

Upper-crossed syndrome (UCS) is also referred to as proximal or shoulder girdle crossed syndrome. In UCS, the pectoralis major and minor, upper trapezius, levator scapulae, and sternocleidomastoid all tighten and shorten. Simultaneously, the lower and middle trapezius, serratus anterior, and rhomboids all weaken. This results in pain and decrease ROM, altered posture of shoulders and head.

ICD-10 code

M54.2

ICD-10 code description

Cervicalgia

Primary outcomes

1

Description

Cranio-vertebral angle rounded shoulder posture angle

Timepoint

Primary outcome measured at 8th week and followup after 4 weeks,

Method of measurement

ImageJ software (National Institutes of Health, Bethesda, MA, USA), NPRS, NDI

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group myofascial release

Category

Rehabilitation

2

Description

Intervention group: myofascial release with 8-Week corrective exercise

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Shapes Active Lifestyle

Full name of responsible person

Dr Meesaq Rizvi

Street address

50 E-1 Christian Colony Road, Block E1 Gulberg III,
Lahore, Punjab

City

Lahore

Postal code

54660

Phone

+92 42 35713306

Email

sportsmedicinepakistan@gmail.com

2

Recruitment center

Name of recruitment center

Max Rehab

Full name of responsible person

Dr Hira Iqbal

Street address

393, Block D3 Block D 3 D-3 WAPDA Town, Lahore,
Punjab

City

Lahore

Postal code

54770

Phone

+92 42 35713306

Email

sportsmedicinepakistan@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Riphah College of Rehabilitation & Allied health
Sciences

Full name of responsible person

Komal Ahmed

Street address

4-A-3 Gulberg 3 Lahore

City

Lahore

Postal code

54660

Phone

+92 42 35713306

Email

ahmed.komal@gmail.com

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Riphah College of Rehabilitation & Allied health Sciences

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

Persons

Person responsible for general inquiries

Contact

Name of organization / entity

Riphah College of Rehabilitation & Allied health
Sciences

Full name of responsible person

Komal Ahmed

Position

Student

Latest degree

Bachelor

Other areas of specialty/work

Physiotherapy

Street address

4-A-3 Gulberg 3 Lahore, Pakistan

City

Lahore

Province

Punjab

Postal code

54660

Phone

+92 42 35713306

Email

ahmed.komal@gmail.com

Person responsible for scientific inquiries

Contact

Name of organization / entity

Riphah College of Rehabilitation & Allied health Sciences

Full name of responsible person

Komal Ahmed

Position

Student

Latest degree

Bachelor

Other areas of specialty/work

Physiotherapy

Street address

4-A-3 Gulberg 3 Lahore, Pakistan

City

Lahore

Province

Punjab

Postal code

54660

Phone

+92 42 35713306

Email

ahmed.komal@gmail.com

Physiotherapy

Street address

4-A-3 Gulberg 3, Lahore, Pakistan

City

Lahore

Province

Punjab

Postal code

54660

Phone

+92 42 35713306

Email

ahmed.komal@gmail.com

Sharing plan**Deidentified Individual Participant Data Set (IPD)**

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

there is no further decision and information decided yet

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 College of Rehabilitation & Allied health Sciences

Full name of responsible person

Komal Ahmed

Position

Student

Latest degree

Bachelor

Other areas of specialty/work