Clinical Trial Protocol
Iranian Registry of Clinical Trials

09 Nov 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° Forward head posture/ Cranio-vertebral angle ≤ 50° 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@ymail.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° Forward head posture/ Cranio-vertebral angle ≤ 50°

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
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54660
Phone
+92 42 35713306
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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
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Riphah College of Rehabilitation & Allied health Sciences
Full name of responsible person
Komal Ahmed
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ahmed.komal@ymail.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
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Other areas of specialty/work
Physiotherapy
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Person responsible for updating data

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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