

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jul 2026

Effects of Active Release Technique and Active Isolated Stretching on the muscles of upper cross syndrome

Protocol summary

Study aim

To determine the effects of Active Release Technique and Active Isolated Stretching on the muscles of upper cross syndrome

Design

two groups, single blinded randomized controlled trial

Settings and conduct

SETTING The study will be conducted in Max rehab and other physiotherapy clinic

Participants/Inclusion and exclusion criteria

Inclusion Criteria • Patients from both genders • patients of age 20 to 40 • patients with a score of 4 or more on numerical pain rating scale (NPRS). • Cranio-vertebral angle measured less than or equal to 50 degree.
Exclusion Criteria Patients were excluded if they exhibited; • any inflammatory arthritis including Rheumatoid arthritis, Ankylosing spondylitis, • cervical spine surgery, • cervical spine trauma, • cervical spine instability

Intervention groups

Group A: active release technique Group B: active Isolated Stretching

Main outcome variables

Muscle length measurement, Forward head posture, Function, Range of Motion

General information

Reason for update

Acronym

UCS, AIS, ART

IRCT registration information

IRCT registration number: **IRCT20200703047993N1**

Registration date: **2020-09-28, 1399/07/07**

Registration timing: **prospective**

Last update: **2020-09-28, 1399/07/07**

Update count: **0**

Registration date

2020-09-28, 1399/07/07

Registrant information

Name

Fizza Ali Syed

Name of organization / entity

Riphah International University

Country

Pakistan

Phone

+92 42 36297030

Email address

fizza.ali.syed@gmail.com

Recruitment status

Not yet recruiting

Funding source

Expected recruitment start date

2641-06-21, 2020/03/31

Expected recruitment end date

2641-12-20, 2020/09/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effects of Active Release Technique and Active Isolated Stretching on the muscles of upper cross syndrome

Public title

Effects of Active Release Technique and Active Isolated Stretching on the muscles of upper cross syndrome

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

• Patients from both genders • patients of age 20 to 40

years • patients with a score of 4 or more on numerical pain rating scale (NPRS). • Cranio-vertebral angle measured less than or equal to 50 degree.

Exclusion criteria:

- any inflammatory arthritis including Rheumatoid arthritis, Ankylosing spondylitis, , • cervical spine surgery, , • cervical spine trauma, , • cervical spine instability

Age

From **20 years** old to **40 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Outcome assessor

Sample size

Target sample size: **34**

Randomization (investigator's opinion)

Randomized

Randomization description

, Once the above mentioned inclusion and exclusion criteria will be taken into account, potential participants will be considered. They will be requested to participate in the study. Written informed consent will be taken from Riphah ethical committee. Each participant will be requested to draw either number one or number two from a box. Number one will be allocated to Group A and number two will be allocated to group B.

Blinding (investigator's opinion)

Single blinded

Blinding description

Outcome Assessor will be blinded by labeling the participants with different codes.

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

2641-04-27, 2020/02/07

Ethics committee reference number

1046

Health conditions studied

1

Description of health condition studied

upper cross syndrome

ICD-10 code

M62.9

ICD-10 code description

Disorder of muscle, unspecified

Primary outcomes

1

Description

- Muscle length measurement

Timepoint

baseline, before and after treatment session, 3 sessions per week on alternate days for a period of 16 sessions.

Method of measurement

Vernier calipers and measuring tape

2

Description

- Cervical ROM

Timepoint

baseline, before and after treatment session, 3 sessions per week on alternate days for a period of 16 sessions.

Method of measurement

Universal Goniometer.

Secondary outcomes

1

Description

function

Timepoint

baseline, before and after treatment session, 3 sessions per week on alternate days for a period of 16 sessions.

Method of measurement

Neck disability index

2

Description

Forward head posture

Timepoint

baseline, before and after treatment session, 3 sessions per week on alternate days for a period of 16 sessions.

Method of measurement

- APECS app

Intervention groups

1

Description

Intervention group :Group A: active release technique. The patients will complete the questionnaire given to them. The researchers screened the participants for tight musculature by testing. To treat muscle with ART, the therapist puts patient in a position so that the muscle is shortened and then applies hands-on tension. Next, they'll instruct the patient to lengthen while they hold the tension in place. They may apply this combination of tension and motion to several different areas before patient feel the full release. Treatment of active release technique given to subjects in Group A performed by researcher at weekly intervals. subjects received active release technique, 3 sets of 10 repetitions per session 3 sessions per week on alternate days for a period of 16 sessions. Session lasts for 40 minutes, three times a week for 6 weeks. The pre and post visit will involve: The researcher will reassess the patient, After the complete session patients will fill the questionnaire again. The researcher will measure the muscle length and compare with the pre-liminary measurement taken.

Category

Treatment - Other

2

Description

Intervention group: Group B: active Isolated Stretching. The patients will complete the questionnaire given to them. The researchers screened the participants for tight musculature by testing. • Treatment of active isolated stretching exercise given to Group B. Perform five to 10 repetitions. The process of holding the stretch for 1-2 seconds is repeated 8-10 times for optimal "melting of the fascia". This intervention is applied for 3 times a week for 5 weeks or 16 sessions. Session lasts for 40 minutes, three times a week for 6 weeks. The pre and post visit will involve: The researcher will reassess the patient, After the complete session patients will fill the questionnaire again ,The researcher will measure the muscle length and compare with the pre-liminary measurement taken.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Max Rehab

Full name of responsible person

Fizza Ali Syed

Street address

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

City

Lahore

Postal code

54000

Phone

Fax

Email

fizza.ali.syed@gmail.com

Web page address

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Riphah International University

Full name of responsible person

Rabiya Noor

Street address

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

City

Lahore

Postal code

54000

Phone

+92 42 35126110

Email

rabiya.noor@yahoo.com

Web page address

Grant name

Educational

Grant code / Reference number

1046

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

Yes

Title of funding source

Riphah International University

Proportion provided by this source

15

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

Riphah international university Lahore

Full name of responsible person

Fizza Ali Syed

Position

student

Latest degree

Bachelor

Other areas of specialty/work

Physiotherapy

Street address

House No 4 street No 36 Qilla gujjar singh Lahore

City

Lahore

Province

Punjab

Postal code

54000

Phone

+92 42 36297030

Email

fizza.ali.syed@gmail.com

Person responsible for scientific inquiries

Contact

Name of organization / entity

Riphah International University Lahore

Full name of responsible person

Fizza Ali Syed

Position

student

Latest degree

Bachelor

Other areas of specialty/work

Physiotherapy

Street address

House No 4 street No 36 Qilla gujjar singh , Lahore

City

Lahore

Province

Punjab

Postal code

54000

Phone

+92 42 36297030

Email

fizza.ali.syed@gmail.com

Person responsible for updating data

Contact

Name of organization / entity

Riphah International University Lahore

Full name of responsible person

Fizza Ali Syed

Position

student

Latest degree

Bachelor

Other areas of specialty/work

Physiotherapy

Street address

House No 4, street No 36, Qilla Gujjar Singh ,Lahore

City

Lahore

Province

Punjab

Postal code

54000

Phone

+92 42 36297030

Fax

Email

fizza.ali.syed@gmail.com

Web page address

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