

Clinical Trial Protocol

Iranian Registry of Clinical Trials

09 Jun 2026

EFFECTIVENESS OF INSTRUMENT ASSISTED SOFT TISSUE MOBILIZATION VERSUS CYRIAX TECHNIQUE FOR MUSCULAR NECK PAIN IN LABORATORY WORKERS

Protocol summary

Study aim

The purpose of the study was to compare the EFFECTIVENESS OF INSTRUMENT ASSISTED SOFT TISSUE MOBILIZATION VERSUS CYRIAX TECHNIQUE FOR MUSCULAR NECK PAIN IN LABORATORY WORKERS

Design

A concealed Randomized ,single blinded, controlled trial with a good design of 96 participants.

Settings and conduct

Study was conducted at 1. • Family hospital and maternity home, Multan 2. •BUCH International Hospital, Multan.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Both Male and Female ,Age 18-45years ,Neck pain on visual analogue scale(VAS) 4-8 (moderate cases), Subacute or chronic cases (4-12 weeks) Exclusion criteria: Not willing to participate, Joint with history of trauma, fracture and degenerative joint disease ,Tumor and rheumatic disease ,Patient diagnose with any bony lesion, Skin infection, Vestibular balance disorder.

Intervention groups

The exercise regime distributed over 06 weeks period(18 sessions) once a day and 03 times per week. Group-A received a treatment program consisting of Instrument assisted soft tissue mobilization. Group-B received cyriax deep friction massage technique. Both groups received gel application before treatment procedure.

Main outcome variables

Pain, Range of motion, Functional status.

General information

Reason for update

Acronym

muscular neck pain

IRCT registration information

IRCT registration number: **IRCT20230316057740N1**

Registration date: **2023-09-08, 1402/06/17**

Registration timing: **retrospective**

Last update: **2023-09-09, 1402/06/18**

Update count: **1**

Registration date

2023-09-08, 1402/06/17

Registrant information

Name

Muhammad Daniyal Jabbar

Name of organization / entity

Muhammad Institute of Medical and Allied Sciences, Multan

Country

Pakistan

Phone

+92 314 6185862

Email address

muhammaddaniyaljabbarali@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-07-27, 1402/05/05

Expected recruitment end date

2023-08-27, 1402/06/05

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

EFFECTIVENESS OF INSTRUMENT ASSISTED SOFT TISSUE MOBILIZATION VERSUS CYRIAX TECHNIQUE FOR

MUSCULAR NECK PAIN IN LABORATORY WORKERS

Public title

INSTRUMENT ASSISTED SOFT TISSUE MOBILIZATION
VERSUS CYRIAX TECHNIQUE FOR MUSCULAR NECK PAIN
IN LABORATORY WORKERS

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

□ Both Male and Female □ Age 18-45years □ Neck pain on visual analogue scale(VAS) 4-8 (moderate cases) □ Subacute or chronic cases (4-12 weeks)

Exclusion criteria:

□ Not willing to participate □ Joint with history of trauma, fracture and degenerative joint disease □ Tumor and rheumatic disease □ Patient diagnose with any bony lesion □ Skin infection □ Vestibular balance disorder

Age

From **18 years** old to **45 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Care provider

Sample size

Target sample size: **96**

Randomization (investigator's opinion)

Randomized

Randomization description

A total of 96 participants will be randomly divided into two groups by the lottery method. Each member of the population will be assigned a number, after which numbers will be selected at random.

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.

Street address

HBL street, Sabzazar metro station, Bosan road
Multan, Pakistan.

City

Multan

Postal code

60700

Approval date

2023-03-02, 1401/12/11

Ethics committee reference number

MIMAS/IRB/02/03/Usman

Health conditions studied

1

Description of health condition studied

Muscular Neck Pain

ICD-10 code

M54.0

ICD-10 code description

Muscular Neck Pain

Primary outcomes

1

Description

Pain

Timepoint

before and after treatment (06 weeks)

Method of measurement

Numeric Pain Rating Scale (NPRS)

2

Description

Range of motion

Timepoint

before and after treatment (06 weeks)

Method of measurement

Goniometer

3

Description

Functional disability

Timepoint

before and after treatment (06 weeks)

Method of measurement

Neck Disability Index (NDI)

Secondary outcomes

1

Description

Functionality

Timepoint

before and after treatment (06 weeks)

Method of measurement

NDI (Neck Disability Index)

2

Description

Pain

Timepoint

before and after treatment (06 weeks)

Method of measurement

NPRS (Numeric Pain Rating Scale)

3

Description

Range of motion

Timepoint

before and after treatment (06 weeks)

Method of measurement

Goniometry

Intervention groups

1

Description

Intervention group: Group-A will be treated with Instrument assisted soft tissue mobilization for about 5 to 7 minutes of duration. This technique is done by specially made devices which used to perform soft tissue mobilization. These devices are available in different shapes and sizes. Gel is applied to treatment area before the proceedings. Gently massage done with special devices for about 5 to 7 minutes. The duration of the treatment is (06 weeks). The frequency of the treatment is 03 times a week and each session lasted for about 10 minutes.

Category

Treatment - Other

2

Description

Intervention group: Group-B will be treated with cyriax deep friction massage for about 5 to 7 minutes. Gel applied to treatment surfaces before session. Gently manual massage given to patients. The duration of the treatment is (06 weeks). The frequency of the treatment is 03 times a week and each session lasted for about 10 minutes.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

- Family hospital and maternity home, Multan.

Full name of responsible person

Muhammad Usman

Street address

HBL street, Sabzazar metro station, Bosan road
Multan, Pakistan.

City

Multan

Postal code

60700

Phone

+92 314 6185862

Email

muhammaddaniyaljabbarali@gmail.com

Web page address

<http://www.mimas.edu.pk/>

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Muhammad Institute of Medical And Allied Sciences,
Multan,

Full name of responsible person

Muhamad Usman

Street address

HBL street, Sabzazar metro station, Bosan road
Multan, Pakistan.

City

Multan

Postal code

60700

Phone

+92 314 6185862

Email

muhammaddaniyaljabbarali@gmail.com

Web page address

<http://www.mimas.edu.pk/>

Grant name

Imran Ahmad Khan

Grant code / Reference number

Muhammad Institute Of Medical and Allied Sciences,
Multan.

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

No

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

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

Muhammad Institute of Medical and Allied Sciences,
Multan.

Full name of responsible person

Muhamad Usman

Position

Professor

Latest degree

Medical doctor

Other areas of specialty/work

Physiotherapy

Street address

HBL street, Sabzazar metro station, Bosan road
Multan, Pakistan.

City

Multan

Province

Punjab

Postal code

60700

Phone

+92 314 6185862

Email

muhammaddaniyaljabbarali@gmail.com

Web page address

<http://www.mimas.edu.pk/>

Person responsible for scientific inquiries**Contact****Name of organization / entity**

Muhammad Institute of Medical and Allied Sciences,
Multan.

Full name of responsible person

Muhamad Usman

Position

Professor

Latest degree

Medical doctor

Other areas of specialty/work

Physiotherapy

Street address

HBL street, Sabzazar metro station, Bosan road
Multan, Pakistan.

City

Multan

Province

Punjab

Postal code

60700

Phone

+92 314 6185862

Email

muhammaddaniyaljabbarali@gmail.com

Web page address

<http://www.mimas.edu.pk/>

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

Muhammad Institute of Medical and Allied Sciences,
Multan.

Full name of responsible person

Muhamad Usman

Position

Professor

Latest degree

Medical doctor

Other areas of specialty/work

Physiotherapy

Street address

HBL street, Sabzazar metro station, Bosan road
Multan, Pakistan.

City

Multan

Province

Punjab

Postal code

60700

Phone

+92 314 6185862

Email

muhammaddaniyaljabbarali@gmail.com

Web page address

<http://www.mimas.edu.pk/>

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