Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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

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+92 314 6185862

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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
Gonoimeter

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
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60700
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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.
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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
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Person responsible for scientific inquiries

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Muhammad Institute of Medical and Allied Sciences, Multan.
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Person responsible for updating data

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Medical doctor
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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