

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Comparative Effects of Instrumental Assisted Soft Tissue Mobilization and Deep Transverse Friction Massage in Patients with Mechanical Neck Pain

Protocol summary

Study aim

to compare the effects of Instrumental Assisted Soft Tissue Mobilization and Deep Transverse Friction Massage on patients with Mechanical Neck Pain

Design

Pragmatic, Community based, parallel group, single blinded, randomized control trial

Settings and conduct

Madina teaching hospital faisalabad

Participants/Inclusion and exclusion criteria

Inclusion criteria Age group (18-40) year. Gender both). Patient having neck pain score 5 or more than 5. Patient having NDI score 14 or more. Patients with inclusive criteria asked to sign the written consent to take part in the research. Exclusion criteria Participants diagnose to any musculoskeletal or auto immune disorder. Any participant with congenital anomalies like cervical rib etc. Having past family history of radiculopathy of the cervical region and cervical trauma. Participant with bilateral trapezius spasm.

Intervention groups

Instrument- assisted soft tissue mobilization .Patients are in this group will give a hot pack, before applying, the advantage of the Garston technique over. Due to its effectiveness and lack of invasiveness, the Garston procedure is expanding quickly. Lubricate the region that has been treated. For 40-120 seconds, try Garston at a 30-60 direction. Deep Transverse Friction Massage. Later power will be applied to the implementation. area to lessen friction, and the skin will be damp and talcum powder will be used. To avoid bruising it was crucial that the therapist's fingertips and the patient's skin moved together as one throughout friction. Instead of sliding over the skin, the fingers engage together it. This technique will cause numbness in the affected area after a few minutes. For four weeks, on three days a week 15-minute sessions were used for therapy.

Main outcome variables

NPRS, GONIOMETER, NECK DISABILITY INDEX

QUESTIONNAIRE

General information

Reason for update

Acronym

IASTM, DTFM, NPRS, NDI

IRCT registration information

IRCT registration number: **IRCT20250509065659N1**

Registration date: **2025-05-29, 1404/03/08**

Registration timing: **retrospective**

Last update: **2025-05-29, 1404/03/08**

Update count: **0**

Registration date

2025-05-29, 1404/03/08

Registrant information

Name

Saira Javed

Name of organization / entity

The University of Faisalabad

Country

Pakistan

Phone

+92 41 8750971

Email address

saira53saira@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2025-05-21, 1404/02/31

Expected recruitment end date

2025-05-21, 1404/02/31

Actual recruitment start date

2025-05-21, 1404/02/31

Actual recruitment end date

2025-05-21, 1404/02/31
Trial completion date
2025-05-21, 1404/02/31

Scientific title
Comparative Effects of Instrumental Assisted Soft Tissue Mobilization and Deep Transverse Friction Massage in Patients with Mechanical Neck Pain

Public title
IASTM vs DTFM on mechanical neck pain

Purpose
Education/Guidance

Inclusion/Exclusion criteria
Inclusion criteria:
Age group (18-40) year Gender both (male and female)
Patient having neck pain score 5 or more than 5 Patient having NDI score 14 or more Patients with inclusive criteria asked to sign the written consent to take part in the research
Exclusion criteria:
Participants diagnose to any musculoskeletal or autoimmune disorder Any participant with congenital anomalies like cervical rib etc Having past family history of radiculopathy of the cervical region and cervical trauma Having any neurological or psychological complications and vascular disorder or infectious disease Participant with bilateral trapezius spasm Any participant with history of recent surgery to neck or upper trunk Suffering from diabetes mellitus

Age
From **18 years** old to **40 years** old

Gender
Both

Phase
N/A

Groups that have been masked

- Participant

Sample size
Target sample size: **34**
Actual sample size reached: **34**

Randomization (investigator's opinion)
Randomized

Randomization description
Randomization through sealed envelope. On probability convenient sampling will use for the study, group allocation will be done by chit and draw method.

Blinding (investigator's opinion)
Single blinded

Blinding description
It is a single blind study, participants will be blinded as they will not know the treatment which they will receive

Placebo
Not used

Assignment
Other

Other design features
sampling technique

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

ETHICS COMMITTEE OF THE UNIVERSITY OF FAISALABAD

Street address

No. West Canal Road, Faisal Town Faisalabad

City

Faisalabad

Postal code

14496-14535

Approval date

2025-05-20, 1404/02/30

Ethics committee reference number

TUF\ Addl Reg\SB\358

Health conditions studied

1

Description of health condition studied

Mechanical neck pain and comparative effects of instrumental assisted soft tissue mobilization and deep transverse friction massage

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

NUMERICAL PAIN RATING SCALE

Timepoint

3 DAYS IN WEEK FOR 4 WEEKS

Method of measurement

1-10 POINTS ON PAPER

2

Description

RANGE OF MOTION OF NECK

Timepoint

3 DAYS IN WEEK FOR 4 WEEKS

Method of measurement

GONIOMETER

Secondary outcomes

1

Description

NECK DISABILITY INDEX

Timepoint

3 TIMES IN A WEEK

Method of measurement
QUESTIONNAIRE

Intervention groups

1

Description

Intervention group: Instrument- assisted soft tissue mobilization Patients are in this group will give a hot pack, before applying, the advantage of the Garston technique over other soft tissue mobilization techniques is that deeper restrictions can be accessible since the metallic exterior of the instruments, such as the deeper fingertip padding, has no impact on tissues. Due to its effectiveness and lack of invasiveness, the Garston procedure is expanding quickly. tips and margins of the apparatus. Lubricate the region that has been treated. For 40-120 seconds, try Garston at a 30-60 direction. This will improve blood supply to the tissues on both sides. If more redness develops after therapies, apply a pack of ice to reduce hyperemia.

Category

Treatment - Other

2

Description

Intervention group: Deep Transverse Friction Massage This group of patients will get a deeply transverse the friction massage. To begin a heated pack will be utilized, and the treatment area must be cleaned with cotton and dried out before receiving treatment. Later power will be applied to the implementation. area to lessen friction, and the skin will be damp and talcum powder will be used. To avoid bruising it was crucial that the therapist's fingertips and the patient's skin moved together as one throughout friction. Direct massage over the lesion and pain site is required. Instead of sliding over the skin, the fingers engage together it. This technique will cause numbness in the affected area after a few minutes. For four weeks, on three days a week 15-minute sessions were used for therapy.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

MADINA TEACHING HOSPITAL
FAISALABAD, PUNJAB, PAKISTAN

Full name of responsible person

DR KHALID PARVEZ BABAR

Street address

Madina teaching hospital faisalabd ,sargodha road
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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

THE UNIVERSITY OF FAISALABAD

Full name of responsible person

SAIRA

Street address

WEST CANAL ROAD FAISALABAD ,FAISAL TOWN

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Web page address

<https://www.tuf.edu.pk/>

Grant name

Grant code / Reference number

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

Yes

Title of funding source

THE UNIVERSITY OF FAISALABAD

Proportion provided by this source

100

Public or private sector

Private

Domestic or foreign origin

Foreign

Category of foreign source of funding

Sponsor: country of origin

Country of origin

PK

Type of organization providing the funding

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

THE UNIVERSITY OF FAISALABAD

Full name of responsible person

Dr.Noreen

Position

Clinical coordinator

Latest degree

Master

Other areas of specialty/work

Physiotherapy

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Web page address<https://www.tuf.edu.pk/>**Person responsible for scientific inquiries****Contact****Name of organization / entity**

THE UNIVERSITY OF FAISALABAD

Full name of responsible person

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Position

Clinical Coordinator

Latest degree

Master

Other areas of specialty/work

Physiotherapy

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Web page address<https://www.tuf.edu.pk/>**Person responsible for updating data****Contact****Name of organization / entity**

THE UNIVERSITY OF FAISALABAD

Full name of responsible person

SAIRA

Position

Student

Latest degree

Master

Other areas of specialty/work

Physiotherapy

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Web page address<https://www.tuf.edu.pk/>**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

for concealing participants identity

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

Not applicable

Analytic Code

No - There is not a plan to make this available

Data Dictionary

Not applicable

Title and more details about the data/document

Comparative effects of instrumental assisted soft tissue mobilization and deep transverse friction massage in patients with mechanical neck pain

When the data will become available and for how long

starting from 2025

To whom data/document is available

only available for people working in academic institutions

Under which criteria data/document could be used

Data will be available to researchers with valid affiliation to any institute

From where data/document is obtainable

saira53saira@gmail.com

What processes are involved for a request to access data/document

Inquirer must provide cover letter stating their reason to obtain data and a brief outlook of their research

Comments

empty