

# 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  
faisalabad ,punjab ,pakistan

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Faisalabd

**Postal code**

092

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ms.mth@mth.org.pk

**Web page address**

<https://mth.org.pk/>

## 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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**Postal code**

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**Phone**

+92 41 87509715

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**Email**

saira53saira@gmail.com

**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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WEST CANAL ROAD FAISALABAD ,FAISAL TOWN

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

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**Latest degree**

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

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SAIRA

**Position**

Student

**Latest degree**

Master

**Other areas of specialty/work**

Physiotherapy

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**Email**

saira53saira@gmail.com

**Web page address**[https://www.tuf.edu.pk](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