Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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
Pragmetic,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 5or more then 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 QUESTIONNARE

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 5or more then 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 musculoskeltal 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 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 painand cpmparative effects of instrumental assisted soft tissue mobilizaton 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
QUESTIONNARE

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 MassageThis 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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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
City
FAISALABAD
Postal code
38000
Phone
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Fax
+92 41 87509715
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 cordinator
Latest degree
Master

Other areas of specialty/work
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Person responsible for scientific inquiries

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Person responsible for updating data

Contact
Name of organization / entity
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Full name of responsible person
SAIRA
Position
Student
Latest degree
Master
Other areas of specialty/work
Physiotherapy
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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