

Clinical Trial Protocol

Iranian Registry of Clinical Trials

09 Jun 2026

Effects of Sustained Natural Apophyseal Glide with and without Myofascial Release Technique on Neck Pain and Posture in Patients with Temporomandibular Joint Disorder

Protocol summary

Study aim

To determine the effects of Sustained Natural Apophyseal Glide with Myofascial Release Technique on neck pain and posture in patients with Temporomandibular Joint Disorders. To determine the effects of Sustained Natural Apophyseal Glide without Myofascial Release Technique on neck pain and posture in patients with Temporomandibular Joint Disorders.

Design

Randomized Clinical Trial

Settings and conduct

The University of Faisalabad

Participants/Inclusion and exclusion criteria

Individuals with mild or average TMJ disorders. Subjects having poor posture were measured through Web Plot Digitizer. Female students with a mean age of 18 to 25 years were taken. Temporomandibular pain is associated with joint noises such as clicking and crepitation. Subjects diagnosed with any vascular disorder of the neck. Presence of any deformity like scoliosis, torticollis, and Sprengel's deformity. Whiplash injuries. Neurological inadequacy. Any prior surgeries of the cervical spine. Cervical radiculopathies.

Intervention groups

All the participants will be divided into two groups. A hot pack will be applied at the baseline. SNAG with MFR Technique was applied to the treatment group. The patient sit upright on the treatment table therapist placed the thumb on the spinous process of C3-C4. To provide mobilization force another thumb will reinforce it. Apply glide in the plane of the facet. While maintaining the glide ask the patient to side bend and rotate toward the painful side. SNAG will be applied to the 2nd group. Ask the patient to relax. The therapist placed the fingers deep into the sub-occipital muscles. Hold pressure for 90-120 sec where first position bind is felt. Repeat this procedure until new sense of bind is felt. When mobility

is restored release the pressure from fascia.

Main outcome variables

Neck Pain Forward Head Posture Temporomandibular Joint Pain

General information

Reason for update

Acronym

Effects of SNAG with and without MFR Technique on Neck Pain and Posture in Patients with Temporomandibular joint disorder

IRCT registration information

IRCT registration number: **IRCT20230707058706N1**

Registration date: **2023-10-08, 1402/07/16**

Registration timing: **retrospective**

Last update: **2023-10-08, 1402/07/16**

Update count: **0**

Registration date

2023-10-08, 1402/07/16

Registrant information

Name

Ume Habiba

Name of organization / entity

The University of Faisalabad

Country

Pakistan

Phone

+92 41 8750971

Email address

dpt-fa16-079@tuf.edu.pk

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-07-19, 1402/04/28
Expected recruitment end date
2023-08-19, 1402/05/28
Actual recruitment start date
empty
Actual recruitment end date
empty
Trial completion date
empty

Scientific title
Effects of Sustained Natural Apophyseal Glide with and without Myofascial Release Technique on Neck Pain and Posture in Patients with Temporomandibular Joint Disorder

Public title
Effects of Sustained Natural Apophyseal Glide with and without Myofascial Release Technique on Neck Pain and Posture in Patients with Temporomandibular Joint Disorder

Purpose
Treatment

Inclusion/Exclusion criteria
Inclusion criteria:
□ Individuals with mild or average TMJ disorders. Subjects having poor posture were measured through Web Plot Digitizer. Female students with a mean age of 18 to 25 years were taken. Temporomandibular pain is associated with joint noises such as clicking and crepitation.
Exclusion criteria:
□ Subjects diagnosed with any vascular disorder of the neck. Presence of any deformity like scoliosis, torticollis and Sprengel's deformity. □ Any prior surgeries of the cervical spine. Cervical radiculopathies. Whiplash injuries. Neurological inadequacy.

Age
From **18 years** old to **25 years** old

Gender
Female

Phase
N/A

Groups that have been masked

- Participant
- Investigator

Sample size
Target sample size: **36**

Randomization (investigator's opinion)
Randomized

Randomization description
The act or process of ordering or selecting people, things, or places in a random way, as in a sample or experiment, especially in order to reduce bias and interference by irrelevant variables: Randomization was achieved by using a computer-generated number to assign each participant to a group.

Blinding (investigator's opinion)
Double blinded

Blinding description
Blinding, or "masking", is the process by which information that has the potential to influence study

results is withheld from one or more parties involved in a research study.

Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
The University of Faisalabad
Street address
Bhera District Sargodha
City
Bhera
Postal code
4683
Approval date
2023-03-17, 1401/12/26
Ethics committee reference number
TUF/Addl Ree/SB/361

Health conditions studied

1

Description of health condition studied
A neck ache can be defined as pain in the neck region that can last for 1 day without being referred to the upper extremity. A neck ache is a common complaint but can also occur in association with pain in the head and shoulder region. It's a most common problem affecting the whole world. A neck muscle spasm occurs by straightening the cervical spine. Straightening of the cervical spine can be seen on X-ray

ICD-10 code
ICD-10 code description

Primary outcomes

1

Description
Neck Pain
Timepoint
Northwick Park neck Questionnaire
Method of measurement
It consists of 9 items including quality of life (QOL), duration of pain, sleep, social activities, watching TV, and carrying. 100 is the greatest score. The higher the value higher damage will be present in patients.

2

Description

Forward Head Posture

Timepoint

Web Plot Digitizer

Method of measurement

Instead of directly measuring angles, Web Plot Digitizer software is primarily intended for extracting data points from 2D plots and graphs. By taking the following actions, you can still use the software to indirectly determine the craniovertebral angle. Obtain a picture or diagram that illustrates the craniovertebral angle you wish to measure. This can be a picture, a diagram, or any other visual that shows the angle clearly. Use your web browser to launch the Web Plot Digitizer program. Make sure you are prepared to upload an appropriate image file of the craniovertebral angle. By selecting the "Upload Image" or comparable option, you can upload an image to the Web Plot Digitizer program. By choosing the points that make up the angle after setting the reference lines, you can manually digitize the craniovertebral angle.

3

Description

Temporomandibular Joint Pain

Timepoint

Numeric Pain Rating Scale

Method of measurement

In a Numerical Rating Scale (NRS), patients are asked to circle the number between 0 and 10, 0 and 20, or 0 and 100 that fits best to their pain intensity. Zero usually represents 'no pain at all' whereas the upper limit represents 'the worst pain ever possible'.

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group:

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

The University of Faisalabad

Full name of responsible person

Dr. Nisar Fatima

Street address

Bhera District Sargodha

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

The University of Faisalabad

Full name of responsible person

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Phone

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Email

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Grant name

No

Grant code / Reference number

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

No

Title of funding source

No

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

Other

Person responsible for general inquiries

Contact

Name of organization / entity

The University of Faisalabad

Full name of responsible person

Rabia Khan

Position

consultant

Latest degree

Medical doctor

Other areas of specialty/work

Physiotherapy

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Person responsible for scientific inquiries

Contact

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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

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

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Yes - There is a plan to make this available

Data Dictionary

Yes - There is a plan to make this available

Title and more details about the data/document

Effects of Sustained Natural Apophyseal Glide with and without Myofascial Release Technique on Neck Pain and Posture in Patients with Temporomandibular Joint Disorder.

When the data will become available and for how long

Data will be available after the completion of study and will remain available till 6 months

To whom data/document is available

Data will be available for other people almost 6 months after the completion of study

Under which criteria data/document could be used

The data/document could be used by communicating with the principle investigator Ume-Habiba gmail: umesaba1212@gmail.com

From where data/document is obtainable

Ume-Habiba umesaba1212@gmail.com

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

The data/document could be used by communicating with the principle investigator Ume-Habiba gmail: umesaba1212@gmail.com

Comments