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 Temporomendibular 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 sprengle‟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

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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 Temporomendibular Joint Disorder

Public title

Effects of Sustained Natural Apophyseal Glide with and without Myofascial Release Technique on Neck Pain and Posture in Patients with Temporomendibular 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 sprengle‟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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Bhera
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7864
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
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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