

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jul 2026

Effectiveness of Alexander technique combined with Mulligan technique in the management of non-specific neck pain: A single blind randomized controlled trial

Protocol summary

Study aim

To determine the effectiveness of alexander technique combined with mulligan technique (SNAGS) in the management of non-specific neck pain

Design

A two-arm, parallel-group, single-blind, randomized controlled clinical trial, 84 participants.

Settings and conduct

Maqsood Medical Complex (MMC)

Participants/Inclusion and exclusion criteria

Inclusion Criteria: Participants with non-specific neck pain; Participants with age 18-40 years; Both genders. Exclusion Criteria: History of any surgery to neck, shoulder, and upper back; History of fracture or any trauma in the neck, shoulder, and upper back; history of any neoplasm or malignancy; Cervical radiculopathy.

Intervention groups

Group A (experimental group): Subjects will receive alexander technique along with Mulligan technique and isometric exercises. Procedure: The alexander technique will include education of patients about mind-body training that helped to correct their posture and it will last for 30 minutes. The mulligan technique will include sustained natural apophyseal glides (SNAGS) to the cervical spine along with active motion followed by overpressure. For the improvement of flexion and extension, central SNAGS will be given to the patients and for improvement of side-bending and rotation, unilateral SNAGS will be given. The procedure will be administered in 3 sets with 10 repetitions for 20 minutes
□ Neck isometrics will include pressing of the palm against the forehead, side of the head and back of the head while resistance will be provided by the muscle of the neck, holding it for 10 seconds then relax and repeating it for 5 times. Group B (control group): Subjects will receive mulligan technique and isometric exercises only.

Main outcome variables

Pain intensity using Visual Analog Scale (VAS) Disability using Neck Disability Index (NDI)

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20211022052833N1**

Registration date: **2021-11-23, 1400/09/02**

Registration timing: **registered_while_recruiting**

Last update: **2021-11-23, 1400/09/02**

Update count: **0**

Registration date

2021-11-23, 1400/09/02

Registrant information

Name

Aatik Arsh

Name of organization / entity

Khyber Medical University

Country

Pakistan

Phone

+92 937 576111

Email address

aatikarsh@kmu.edu.pk

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-11-20, 1400/08/29

Expected recruitment end date

2022-02-28, 1400/12/09

Actual recruitment start date

empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Effectiveness of Alexander technique combined with Mulligan technique in the management of non-specific neck pain: A single blind randomized controlled trial

Public title
Physical therapy for the management of neck pain

Purpose
Treatment

Inclusion/Exclusion criteria
Inclusion criteria:
 Participants with non-specific neck pain Participants with age 18-40 years Both genders
Exclusion criteria:
 History of any surgery to neck, shoulder and upper back
 History of fracture or any trauma in neck, shoulder and upper back
 Any history of neoplasm or malignancy
 Cervical radiculopathy

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

Gender
Both

Phase
N/A

Groups that have been masked

- Outcome assessor

Sample size
Target sample size: **84**

Randomization (investigator's opinion)
Randomized

Randomization description
Subjects will be allocated randomly into treatment group and control group through simple random sampling by flip the coin method.

Blinding (investigator's opinion)
Single blinded

Blinding description
Current study will be a single blind study. The assessor will be blinded in this clinical trial. Assessor will be only responsible for collecting pre and post treatment data. He/she will not be involved in randomizing the subjects or delivering the intervention, thus he/she will have no idea about subjects allocated to which group.

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids
empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethical Committee Khyber Medical University

Street address

Phase 5 Hayatabad Peshawar Pakistan

City

Peshawar

Postal code

25000

Approval date

2021-03-18, 1399/12/28

Ethics committee reference number

DIR/KMU-AS&RB/EA/001346

Health conditions studied

1

Description of health condition studied

neck pain

ICD-10 code

ICD-10 code description

neck pain

Primary outcomes

1

Description

Pain

Timepoint

Before intervention and after 4 weeks of intervention

Method of measurement

Visual analogue scale

2

Description

Disability

Timepoint

Before intervention and after 4 weeks of intervention

Method of measurement

Neck disability index

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Subjects will receive alexander technique along with Mulligan technique and isometric exercises. Procedure: The alexander technique session will include education of patient about mind-body training that will help to correct their posture and it will

last for 30 minutes. The mulligan technique will include sustained natural apophyseal glides (SNAGs) to the cervical spine along with active motion followed by overpressure. For the improvement of flexion and extension central SNAGs will be given to the patients and for improvement of side-bending and rotation, unilateral SNAGs will be given. The procedure will be administered in 3 sets with 10 repetitions for 20 minutes. Neck isometrics will include pressing of the palm against the forehead, side of the head and back of the head while resistance will be provided by the muscle of the neck, holding it for 10 seconds then relax and repeating it for 5 times.

Category

Rehabilitation

2**Description**

Control group: Subjects will receive mulligan technique and isometric exercises only.

Category

Rehabilitation

Recruitment centers**1****Recruitment center****Name of recruitment center**

Maqsood Medical Complex Peshawar Pakistan

Full name of responsible person

Dr. Sana Fatima

Street address

Dalazak Road, Main City Peshawar

City

Peshawar

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25000

Phone

+92 91 9217266

Email

sfpreciousprayer74@gmail.com

Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Khyber Medical University

Full name of responsible person

Mujeeb Ur Rehman

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mujeeb.rahman@kmu.edu.pk

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Khyber Medical University

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin**Type of organization providing the funding**

Academic

Person responsible for general inquiries**Contact****Name of organization / entity**

Khyber Medical University

Full name of responsible person

Aatik Arsh

Position

Assistant Professor

Latest degree

Master

Other areas of specialty/work

Physiotherapy

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Person responsible for scientific inquiries**Contact****Name of organization / entity**

Khyber Medical University

Full name of responsible person

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Latest degree

Master

Other areas of specialty/work

Physiotherapy

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Person responsible for updating data**Contact****Name of organization / entity**

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Full name of responsible person

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Assistant Professor

Latest degree

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Other areas of specialty/work

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Fax**Email**

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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

All the data related to trial will be available on research specific social media websites such as Researchgate and academia

When the data will become available and for how long

It is expected that data will be available after March 2022. It will remain available.

To whom data/document is available

People working in academia and businesses can apply to receive it.

Under which criteria data/document could be used

Principal investigator will be responsible to decide it.

From where data/document is obtainable

Researchgate and academia (from profile page of principal investigator)

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

Researchers can directly obtain it from Researchgate or academia (from profile page of principal investigator)

Comments