Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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

Postal code
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

Street address
Phase 5 Hayatabad Peshawar Pakistan

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25000

Phone
+92 91 5813015

Email
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

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Person responsible for updating data

Contact
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Latest degree
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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
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 decided it.
From where data/document is obtainable
Researchgate and academia (from profile page of prinicpal investigator)
What processes are involved for a request to access data/document
Researchers can directly obtained it from Researchgate or academia (from profile page of prinicpal investigator)
Comments