Clinical Trial Protocol
Iranian Registry of Clinical Trials

29 Jun 2026

Effectiveness of Neuromobilization on Pain,Range of motion,Muscle Endurance and Disability in Cervical Radiculopathy,A Randomized Controlled Trial

Protocol summary

Study aim
To determine the effect of neuromobilization in cervical rediculopathy as this is cost effective treatment.

Design
A double blinded randomized controlled trial

Settings and conduct
Physiotherapy department of Mayo hospital Lahore Punjab,Pakistan.IRB Approved

Participants/Inclusion and exclusion criteria
Inclusion criteria: Age group between 35-50 years . Gender both male and female. Subjects having radiating symptomsof cervical radiculopathy .Subjects with no previous cervical surgeries . Subjects with no loss of the upper limb movement. Exclusion criteria: Subjects having traumatic history . Subjects with Osteoporosis . Hypermobile patients . Subjects with circulatory disturbances . Subjects with peripheral nerve entrapment . Subjects with tumor causing cervical radiculopathy . Patients who are not willing to be included in the study.

Intervention groups
(Experimental group): A neural mobilization technique with sliding of median nerve will be applied with 3 seconds hold in each repetition In this group conservative treatment which will include cervical isometrics exercises with 10 repetitions in each direction with 5 seconds hold will also be given. Isometric exercises will be performed with the patient in sitting position. (control group): Conservative treatment will be given which will include cervical isometrics exercises with 10 repetitions in each direction with 5 seconds hold will also be given. Isometric exercises will be performed with the patient in sitting position 3 sets of these exercises will be performed with the rest period of 30seconds. All the subjects will be given hot packs for 10 minutes prior to the treatment.

Main outcome variables
Range of motion measured by inclinometer,Pain intensity meaured by visual analogue scale,Muscle endurance bycranio cervical flexion test,Disability by neck diability index

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20190325043109N1**
Registration date: **2019-06-30, 1398/04/09**
Registration timing: **prospective**

Last update: **2019-06-30, 1398/04/09**
Update count: **0**

Registration date
2019-06-30, 1398/04/09

Registrant information

Name
shazia rafiq

Name of organization / entity
University of Lahore

Country
Pakistan

Phone
+92 42 99200600

Email address
shazesarfraz@gmail.com

Recruitment status
Not yet recruiting

Funding source

Expected recruitment start date
2640-06-22, 2019/04/01

Expected recruitment end date
2641-12-21, 2020/09/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effectiveness of Neuromobilization on Pain,Range of motion,Muscle Endurance and Disability in Cervical Radiculopathy,A Randomized Controlled Trial

Public title

Effectiveness of Neuromobilization in neck pain

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Age group between 35-50 years Gender both male and female Subjects having radiating symptomsof cervical radiculopathy Subjects with no previous cervical surgeries Subjects with no loss of the upper limb movement

Exclusion criteria:

Subjects having traumatic history Subjects with Osteoporosis Hypermobile patients Subjects with circulatory disturbances Subjects with peripheral nerve entrapment Subjects with tumor causing cervical radiculopathy Patients who are not willing to be included in the study.

Age

From **35 years** old to **50 years** old

Gender

Both

Phase

1

Groups that have been masked

- Participant
- Outcome assessor
- Data analyser

Sample size

Target sample size: **88**

Randomization (investigator's opinion)

Randomized

Randomization description

Randomization: Randomization sequence will be created by using Excel 2016 with a 1:1 allocation using simple randomization by an independent researcher who will not be participating in treatment of patients. Patients will be allocated to two groups by concealment of allocation through sealed envelopes. Concealment of allocation: Allocation concealment will be achieved with sequentially numbered, opaque, sealed, envelopes SNOSE. SNOSE will be used according to guidelines of Doig and Simpson 26. An independent researcher with no clinical involvement in the trial will make the concealed envelopes. 88 Envelopes will be made. Half envelops will contain folded papers with Treatment A written on them and the remaining half will contain folded papers with Treatment B written on them. A carbon paper will be inserted in each envelop with carbon side facing the paper so the allocation sequence, patient name, date of birth of participant and other information can be transferred onto allocation paper inside the envelope. A piece of tin foil is also inserted into envelop so the treatment card cannot be read against light. Envelops will be sealed and signed by the maker. A unique randomized number will be allocated to these envelops and shuffled vigorously. Then the envelops will be arranged sequentially and handed over to another independent researcher. 28 Assessor will pretest the participant and if eligible envelope will be allocated to subject. Therapist will record the information on the envelope and open it afterwards to maintain the concealment. Assessor will record the post treatment findings and another independent analyst will analyze the data. This allocation of concealment will ensure the unpredictability of treatment allocation by investigators and patients.

Blinding (investigator's opinion)

Double blinded

Blinding description

Blinding: In this study patients, assessors, data analysts will be blinded to allocation of treatment groups in this study. Except for the therapist all other staff will be kept blinded as they will not be informed about the details of allocation. Trial will be adhered to established procedures to maintain separation between staff who will collect outcome measurements and the therapist. Patient will be blinded to treatment allocation as treatment will be given in separate rooms for each group. Therapist who is not blinded will not take the outcome measurements. All the other assessors, investigators and analysts will not know the details of treatment.

Placebo

Not used

Assignment

Crossover

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Institutional Review Board,University of Lahore

Street address

Raiwind Road

City

Lahore

Postal code

53720

Approval date

2639-11-11, 2018/08/20

Ethics committee reference number

IRB-UOL-FAHS/373-VI/2018

Health conditions studied

1

Description of health condition studied
Patients suffering from cervical rediculopathy leading decrease their input in all type of activities they are unable to coop with their daily routine due to pain and decrease range of motion their quality of life impaired.
ICD-10 code
M50.1
ICD-10 code description
Cervical disc disorders

Primary outcomes

1

Description
Pain
Timepoint
Pre assessment will be done at baseline, second assessment will be done after 2 weeks and final post assessment will be done at the end of 12th session in 4th week
Method of measurement
Pain by Visual analogue scale

2

Description
Range of motion
Timepoint
Pre assessment will be done at baseline, second assessment will be done after 2 weeks and final post assessment will be done at the end of 12th session in 4th week
Method of measurement
Range of motion will be measured by Inclinometer

3

Description
Muscle endurance
Timepoint
Pre assessment will be done at baseline, second assessment will be done after 2 weeks and final post assessment will be done at the end of 12th session in 4th week
Method of measurement
By Cranio Cervical flexion test

4

Description
Neck Disability
Timepoint
Pre assessment will be done at baseline, second assessment will be done after 2 weeks and final post assessment will be done at the end of 12th session in 4th week
Method of measurement
Neck disability index

5

Description
Quality of life
Timepoint
Pre assessment will be done at baseline, second assessment will be done after 2 weeks and final post assessment will be done at the end of 12th session in 4th week
Method of measurement
SF 36 Questionnaire

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Group A (Experimental group): In group A neural mobilization technique with sliding of median nerve will be applied with 3 seconds hold in each repetition, Neural mobilization will be done according to technique described by David Butler. Subject will be placed in supine position and slider neural mobilization of the median nerve will be given.In this group conservative treatment which will include cervical isometrics exercises with 10 repetitions in each direction with 5 seconds hold will also be given. Isometric exercises will be performed with the patient in sitting position.
Category
Treatment - Other

2

Description
Control group: Group B (control group): In group B conservative treatment will be given which will include cervical isometrics exercises with 10 repetitions in each direction with 5 seconds hold will also be given. Isometric exercises will be performed with the patient in sitting position 3 sets of these exercises will be performed with the rest period of 30seconds. All the subjects will be given hot packs for 10 minutes prior to the treatment
Category
Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Mayo Hospital Lahore
Full name of responsible person
Nighat Ansar
Street address
Near Neela Gunbad Anarkali Bazar

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53720
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shazesarfraz@gmail.com

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
The University Of Lahore
Full name of responsible person
Shazia Rafiq
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Raiwind Road
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Postal code
53270
Phone
+92 42 99200600
Email
shazesarfraz@gmail.com
Grant name
N/A
Grant code / Reference number
N/A
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
The University Of Lahore
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 Lahore
Full name of responsible person
Umair Ahmed
Position
Assistant Professor
Latest degree
Master
Other areas of specialty/work
Neuro Rehab
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Person responsible for scientific inquiries

Contact
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Full name of responsible person
Shazia Rafiq
Position
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Latest degree
Master
Other areas of specialty/work
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Person responsible for updating data

Contact
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Full name of responsible person
Shazia Rafiq
Position
Senior Physiotherapist
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Other areas of specialty/work
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Province
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Postal code
53720
Phone

N/A

Email

shazesarfraz@gmail.com

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

No - There is not a plan to make this available

Clinical Study Report

No - There is not a plan to make this available

Analytic Code

Not applicable

Data Dictionary

No - There is not a plan to make this available

Title and more details about the data/document

EFFECTIVENESS OF NEURO MOBILIZATION ON PAIN, RANGE OF MOTION, MUSCLE ENDURANCE AND DISABILITY IN CERVICAL RADICULOPATHY: A RANDOMIZED CONTROLLED TRIAL.

When the data will become available and for how long

Data will be available when my Ph.D Study completed

To whom data/document is available

For academic institutions only

Under which criteria data/document could be used

People who will request for data

From where data/document is obtainable

Through email address

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

My email address

Comments

N/A