

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

The comparison of the effect of Cervical spine 5- Cervical spine 7 mobilization with median nerve neurodynamic technique on pain, neck disability index and elbow ROM in patients with cervical radiculopathy.

Protocol summary

Study aim

Objectives : The present study aimed to compare the effectiveness of cervical spine(C5,C6,C7) mobilization with median neurodynamic technique in the pain relief and Neck Disability Index and elbow range of motion for patients with cervical radiculopathy.

Design

Design: This study is an double blinded interventional clinical trial .36 patients with cervical radiculopathy randomly allocated to 3 different groups. This study was carried out in physical therapy clinics affiliated to Shiraz University of Medical Sciences.

Settings and conduct

In the clinic of Shiraz Faculty of Rehabilitation Sciences

Participants/Inclusion and exclusion criteria

36 patients with cervical radiculopathy Inclusion criteria: 35-50 years old, median nerves involved for at most 4 months, symptoms of pain radiating into the arm and C5, C6 and C7 roots involved. Exclusion criteria: patients with radial and ulna nerve involvement, patients with neck pain alone or arm pain alone, carpal tunnel syndrome.

Intervention groups

The patients in group A received mobilization technique and electrical stimulation and heat therapy, in group B received median nerve neurodynamic technique, and electrical stimulation and heat therapy ,in group C received electrical stimulation and heat therapy for 20 minutes, respectively.

Main outcome variables

main outcome measures: The mean neck pain intensity , neck disability ,The mean range of motion (ROM) of elbow extension , the F-wave from flexor carpi radialis to evaluate function of median nerve.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20120411009440N21**

Registration date: **2019-04-30, 1398/02/10**

Registration timing: **retrospective**

Last update: **2019-04-30, 1398/02/10**

Update count: **0**

Registration date

2019-04-30, 1398/02/10

Registrant information

Name

Soraya Pirouzi

Name of organization / entity

School of Rehabilitation Sciences, Shiraz University of Medical Sciences

Country

Iran (Islamic Republic of)

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+98 71 1626 5108

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Recruitment status

Recruitment complete

Funding source

shiraz university of medical science

Expected recruitment start date

2015-08-06, 1394/05/15

Expected recruitment end date

2015-11-06, 1394/08/15

Actual recruitment start date

empty

Actual recruitment end date

empty
Trial completion date
empty

Scientific title
The comparison of the effect of Cervical spine 5- Cervical spine 7 mobilization with median nerve neurodynamic technique on pain, neck disability index and elbow ROM in patients with cervical radiculopathy.

Public title
The comparison of the effect of C5-C7 mobilization with median nerve neurodynamic technique on pain, neck disability index and elbow ROM in patients with cervical radiculopathy.

Purpose
Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

age between 35-50 history of median nerve involvement at most 4 months with no manual therapy C5 - C6 - C7 root involvement with radicular pain to arm at least three positive tests out of four: spurling test, distruction test, upper limb tention test (ULTT), neck rotation under 60 degree

Exclusion criteria:

any history of trauma neck and upper limb inflammation rheumatic disease severe osteoporosis tumor and cancer of head and neck and upper limbs neck and upper limb hypermobility patient with taking analgesic drugs radial and ulna nerve involvement neck pain alone or arm pain alone cognitive disorders carpal tunnel syndrome (CTS)

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

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **36**

Randomization (investigator's opinion)
Randomized

Randomization description
In this study, random number table are used to allocate individuals to groups.

Blinding (investigator's opinion)
Not blinded

Blinding description
Placebo

Not used

Assignment
Parallel

Other design features

Secondary Ids
empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Shiraz University of Medical Sciences

Street address

Zand Blvd., Central Building of Shiraz University of Medical Sciences

City

Shiraz

Province

Fars

Postal code

713451978

Approval date

2014-08-26, 1393/06/04

Ethics committee reference number

IR.SUMS.REC.1393.S6984

Health conditions studied

1

Description of health condition studied

cervical radiculopathy

ICD-10 code

G54.2

ICD-10 code description

Cervical root disorders, not elsewhere classified

Primary outcomes

1

Description

Neck pain

Timepoint

before and after of treatment

Method of measurement

numerical pain rating scale

2

Description

Neck disability

Timepoint

before and after of treatment

Method of measurement

Neck disability index

Secondary outcomes

1

Description

passive range of motion (degrees) elbow extention

Timepoint

before and after of treatment

Method of measurement

Goniometer

2

Description

F wave parameter

Timepoint

before and after of treatment

Method of measurement

electromyography Sapphire 2 model made in england

Intervention groups

1

Description

Group A cervical mobilization(C5-C7) 60 seconds with three repetitions, electrical stimulation and heat therapy for 20 minutes for 5 times a week

Category

Treatment - Other

2

Description

Group B median nerve neurodynamic technique in 10 seconds, electrical stimulation and heat therapy for 20 minutes for 5 times a week

Category

Treatment - Other

3

Description

Electrotherapy (electrical stimulation and heat therapy) for 20 minutes, 5 times a week

Category

Treatment - Devices

Recruitment centers

1

Recruitment center

Name of recruitment center

Medicine clinic of Shiraz university

Full name of responsible person

Saeede Sarvari

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research , Shiraz University of Medical Sciences

Full name of responsible person

Dr Seyyed Bashir Hashemi

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Grant name

Grant code / Reference number

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

Yes

Title of funding source

Vice chancellor for research , Shiraz University of Medical Sciences

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

School of Rehabilitation Sciences, Shiraz

Full name of responsible person

Soraya Piroozi

Position

faculty member

Latest degree

Ph.D.

Other areas of specialty/work

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Person responsible for updating data

Contact

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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

The comparison of the effect of C5-C7 mobilization with median nerve neurodynamic technique on pain, neck disability index and elbow ROM in patients with cervical radiculopathy.

When the data will become available and for how long

23 july until 21september

To whom data/document is available

researcher

Under which criteria data/document could be used

study and research

From where data/document is obtainable

shiraz school of rehabilitation sciences

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

therapeutic

Comments