Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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 nuerodynamic 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

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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
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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
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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
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Person responsible for updating data

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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