Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Comparison of neuromobilization with splint immobilization in patients with mild to moderate carpal tunnel syndrome

Protocol summary

Summary

(1) Objective: The aim of this study is to compare two methods of neuromobilization with splint immobilization in treating patients with mild to moderate carpal tunnel syndrome. (2) Design: In this study, 60 patients with mild to moderate carpal tunnel syndrome which their disease was confirmed by physical medicine and rehabilitation specialist will be included in the study after qualifying the inclusion and exclusion criteria and obtaining the informed consent. (3) Setting and conduct: Patients will be randomly divided to groups of thirty. For randomization we will use computerized randomization with Excel software. Inclusion criterion is clinical and electrodiagnostic demonstration of mild to moderate carpal tunnel syndrome. Exclusion criteria are clinical and electrodiagnostic severe carpal tunnel syndrome, history of trauma or fracture of the wrist, history of surgical release of nerve, signs of cervical radiculopathy in C6 - C7, systemic diseases such as neuropathies, rheumatoid arthritis, hypothyroidism, diabetes mellitus and renal failure. (4) Interventions: In intervention group neuromobilization techniques will be taught to patients and they will be asked to perform them three times a day each time for three seconds in a three weeks period. On the other hand in control group, immobilization and wrist splint will be administered for three weeks. Patients in both groups will receive 25 mg Diclufenac tablet two times a day. They also will be advised to avoid doing severe activities with their hand. (5) Main outcome measures: Boston questionnaire score, hand forces and EMG-NCV findings will be evaluated before initiating the protocol and after finalizing the study at the end of the third week.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201412014641N9**

Registration date: **2015-01-10, 1393/10/20**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2015-01-10, 1393/10/20

Registrant information

Name

Bina Eftekharsadat

Name of organization / entity

Tabriz university of medical sciences

Country

Iran (Islamic Republic of)

Phone

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Tabriz University of Medical Sciences

Expected recruitment start date

2014-11-22, 1393/09/01

Expected recruitment end date

2015-01-21, 1393/11/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of neuromobilization with splint immobilization in patients with mild to moderate carpal tunnel syndrome

Public title
Comparison of two therapeutic methods in patients with mild to moderate carpal tunnel syndrome
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criterion: Cinical and electrodiagnostic demonstration of mild to moderate carpal tunnel syndrome. Exclusion criteria: Clinical and electrodiagnostic severe carpal tunnel syndrome; history of trauma or fracture of the wrist; history of surgical release of nerve; signs of cervical radiculopathy in C6 - C7; systemic diseases such as neuropathies, rheumatoid arthritis, hypothyroidism, diabetes mellitus and renal failure.
Age
From **14 years** old to **60 years** old
Gender
Both

Phase
2-3
Groups that have been masked
No information
Sample size
Target sample size: **60**
Randomization (investigator's opinion)
Randomized
Randomization description
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 Tabriz University of Medical Sciences
Street address
Ethics committee, Tabriz University of Medical Sciences, Golgasht Street, Azadi Street, Tabriz
City
Tabriz
Postal code
Approval date
2014-10-20, 1393/07/28
Ethics committee reference number
93921

Health conditions studied

1

Description of health condition studied
Carpal tunnel syndrome
ICD-10 code
G56.0
ICD-10 code description
Carpal tunnel syndrome

Primary outcomes

1

Description
Boston questionnare
Timepoint
Before study and after it
Method of measurement
By using Boston questionnare

2

Description
EMG-NCV criteria
Timepoint
Before study and after it
Method of measurement
By using EMG-NCV device

Secondary outcomes

empty

Intervention groups

1

Description
In intervention group neuromobilization techniques will be taught to patients and they will be asked to perform them three times a day each time for three seconds in a three weeks period.
Category
Treatment - Other

2

Description
In control group, immobilization and wrist splint will be administered for three weeks
Category
Treatment - Devices

Recruitment centers

1

Recruitment center
Name of recruitment center
Imam Reza Hospital

Full name of responsible person
Dr. Bina Eftekharsadat
Street address
Department of Physical Medicine and rehabilitation, Imam Reza Hospital, Daneshgah Square, Tabriz
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Physical medicine and rehabilitation researches center
Full name of responsible person
Dr. Seyyed Kazem Shakouri
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Department of Physical Medicine and rehabilitation, Imam Reza Hospital, Daneshgah Square, Tabriz
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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
Physical medicine and rehabilitation researches center
Proportion provided by this source
100
Public or private sector
empty
Domestic or foreign origin
empty
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
empty

Person responsible for general inquiries

Contact
Name of organization / entity
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
empty
Study Protocol
empty
Statistical Analysis Plan
empty
Informed Consent Form
empty
Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty