

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jul 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 Diclofenac 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

+98 41 1330 3193

Email address

binasadat@tbzmed.ac.ir

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: Clinical 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 questionnaire

Timepoint

Before study and after it

Method of measurement

By using Boston questionnaire

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

City

Tabriz

farzadheydari1@gmail.com

Web page address**Person responsible for scientific inquiries****Contact****Name of organization / entity**

Tabriz University of Medical Sciences

Full name of responsible person

Dr. Bina Eftekharsadat

Position

Associate professor of Physical Medicine &
rehabilitation

Other areas of specialty/work**Street address**

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Web page address**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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Tabriz

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**

Tabriz University of Medical Sciences

Full name of responsible person

Farzad Heidari

Position

Medicine student

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Fax**Email****Person responsible for updating data****Contact****Name of organization / entity**

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Dr. Bina Eftekharsadat

Position

Associate professor of Physical Medicine &
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Fax**Email****Web page address****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