

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Sep 2026

The concurrence of upper limb myofascial pain syndrome with carpal tunnel syndrome and the effects of dry needling on the reduction of pain and improving function of these patients

Protocol summary

Summary

(1) Objective: The aim of this study is to evaluate concurrence of upper limb myofascial pain syndrome with carpal tunnel syndrome and the effects of dry needling on the reduction of symptoms. (2) Design: In this study, 50 patients with mild to moderate carpal tunnel syndrome (CTS) which their condition was confirmed using EMG-NCV were 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 25. For randomization. We will use computerized randomization with Excel software. Inclusion criteria are having mild to moderate CTS and willingness to participate in the study. Exclusion criteria are any history of local injection or surgery related to CTS, radiculopathy, coexisting disease (rheumatoid arthritis, osteoarthritis, diabetes, and hypothyroidism) and severe CTS. (4) Interventions: In control group, wristbands, Nonsteroidal anti-inflammatory drugs and Gabapentin tablet (300 mg daily) will be administered. In intervention group, besides all these, dry needling on trigger points of brachioradialis muscle will be performed. (5) Main outcome measures: Patients' pain and functional status will be evaluated before, one week and six weeks after intervention.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201602051292N4**
Registration date: **2016-03-07, 1394/12/17**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2016-03-07, 1394/12/17

Registrant information

Name

Vahideh Toopchizadeh

Name of organization / entity

Tabriz University of Medical Sciences

Country

Iran (Islamic Republic of)

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+98 984113335625

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Tabriz University of Medical Sciences

Expected recruitment start date

2016-02-03, 1394/11/14

Expected recruitment end date

2016-06-03, 1395/03/14

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The concurrence of upper limb myofascial pain syndrome with carpal tunnel syndrome and the effects of dry needling on the reduction of pain and improving function of these patients

Public title

Effects of needling on the reduction of upper limb's pain

Purpose

Treatment

Inclusion/Exclusion criteria
Inclusion criteria: having mild to moderate CTS; willingness to participate in the study. Exclusion criteria: any history of local injection or surgery related to CTS; radiculopathy; coexisting disease (rheumatoid arthritis, osteoarthritis, diabetes, and hypothyroidism); severe CTS.

Age
From **18 years** old to **65 years** old

Gender
Both

Phase
2-3

Groups that have been masked
No information

Sample size
Target sample size: **50**

Randomization (investigator's opinion)
N/A

Randomization description

Blinding (investigator's opinion)
Single 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

2016-01-04, 1394/10/14

Ethics committee reference number

TBZMED.REC.1394.877

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

Patients' pain

Timepoint

Before, one and six weeks after intervention

Method of measurement

Using visual analogue scale

Secondary outcomes

1

Description

Patient' functional status

Timepoint

Before, one and six weeks after intervention

Method of measurement

Using Boston questionnaire

Intervention groups

1

Description

In control group, wristbands, Nonsteroidal anti-inflammatory drugs and Gabapentin tablet (300 mg daily) will be administered.

Category

Treatment - Other

2

Description

In intervention group besides using wristbands, Nonsteroidal anti-inflammatory drugs and Gabapentin tablet (300 mg daily), dry needling of brachioradialis muscle' trigger points will be performed.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Imam Reza Hospital

Full name of responsible person

Dr. Shima Karimnia

Street address

Department of Physical Medicine and Rehabilitation, Imam Reza Hospital, Daneshgah Square, Tabriz

City

Tabriz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research, Tabriz University of Medical Sciences

Full name of responsible person

Dr. Hasan Soleymanpour

Street address

Vice chancellor for research, Tabriz University of Medical Sciences, Daneshgah square, Tabriz 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

Vice chancellor for research, Tabriz University of Medical Sciences

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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Full name of responsible person

Dr. Shima Karimnia

Position

Physical medicine and rehabilitation resident

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Position

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

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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