

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jun 2026

The effects of exercise therapy on functional status in people with Carpal Tunnel Syndrome

Protocol summary

Study aim

The effects of exercise therapy on functional status, pain, and wrist strength in people with Carpal Tunnel Syndrome

Design

Clinical trials with control group, with encoded envelopes, with parallel groups, one blind, randomized,

Settings and conduct

Eligible individuals are divided into two 32 person groups of intervention and control based on encoded envelopes. At the first session, exercise therapy is taught in practice, and then in the same session, the same exercises are provided in the form of a brochure with illustrations and explanations. The exercises are carried out three times a day for 6 weeks, 5 days a week. The duration of the exercises is 30 minutes per day, which includes 10 minutes of gliding exercises, 10 minutes of stretching exercises and 10 minutes of resistive exercises. Patients will be referred to the clinic weekly (one session a week), and the exercises will be checked by the therapist at the end of each week in the form of an instruction, a checklist, and a timetable to be given to the patient and filled in.

Participants/Inclusion and exclusion criteria

Women aged 25-55 years with mild to moderate Carpal Tunnel Syndrome who do not have other orthopedic and neurological diseases.

Intervention groups

Intervention group: tendon and nerve gliding exercises, mobilization and stretching exercises and resistive exercises
Control group: Common carpal tunnel syndrome interventions other than those mentioned in the inclusion criteria.

Main outcome variables

To collect data, demographic questionnaire; Boston questionnaire; McGill Pain Questionnaire and dynamometer are used. These evaluations are done in two groups in four intervals before, during and immediately after the end of intervention and one month

after the intervention.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20100313003551N9**

Registration date: **2018-03-10, 1396/12/19**

Registration timing: **prospective**

Last update: **2018-03-10, 1396/12/19**

Update count: **0**

Registration date

2018-03-10, 1396/12/19

Registrant information

Name

Parvin Raji

Name of organization / entity

Tehran University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 21 7753 8798

Email address

praji@tums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2018-04-04, 1397/01/15

Expected recruitment end date

2018-08-06, 1397/05/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effects of exercise therapy on functional status in people with Carpal Tunnel Syndrome

Public title

The effects of exercise therapy on functional status in people with Carpal Tunnel Syndrome

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Women 25 to 55 years old Diagnosis based on physician diagnosis (mild to moderate) according to electrophysiological reports and Nerve Conduction Studies Absence of disorders such as orthopedic disorders, diabetes mellitus, rheumatoid arthritis, hypothyroidism and other autoimmune diseases No use of analgesics and steroids at the time of evaluation No use of corticosteroid drugs in the last 6 months Absence of conditions such as pregnancy, history of wrist surgery, cognitive disorders and severe Carpal Tunnel Syndrome (atrophy in tension muscles)

Exclusion criteria:

Lack of cooperation or absenteeism in meetings

Age

From **25 years** old to **55 years** old

Gender

Female

Phase

N/A

Groups that have been masked

- Outcome assessor

Sample size

Target sample size: **64**

Randomization (investigator's opinion)

Randomized

Randomization description

Based on encoded envelopes

Blinding (investigator's opinion)

Single blinded

Blinding description

The evaluator is not aware of the allocation of people to control and intervention groups.

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1**

Ethics committee

Name of ethics committee

Ethics committee of Tehran University of Medical Sciences

Street address

Keshavarz Blvd., Qods Ave

City

Tehran

Province

Tehran

Postal code

1417653761

Approval date

2018-02-01, 1396/11/12

Ethics committee reference number

IR.TUMS.FNM.REC.1396.4399

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**

Hand Function

Timepoint

Before, during and immediately after the end of intervention and one month after the intervention

Method of measurement

Boston Questionnaire

2**Description**

Pain

Timepoint

Before, during and immediately after the end of intervention and one month after the intervention

Method of measurement

McGill Pain Questionnaire (MPQ)

3**Description**

Wrist strength

Timepoint

Before, during and immediately after the end of intervention and one month after the intervention

Method of measurement

Dynamometer

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Tendon and nerve gliding exercises, mobilization and stretching exercises and resistive exercises. At the first session, exercise therapy is taught in practice, and then in the same session, the same exercises are provided in the form of a brochure with illustrations and explanations. The exercises are carried out three times a day for 6 weeks, 5 days a week. The duration of the exercises is 30 minutes per day, which includes 10 minutes of gliding exercises, 10 minutes of stretching exercises and 10 minutes of resistive exercises. Patients will be referred to the clinic weekly (one session a week), and the exercises will be checked by the therapist at the end of each week in the form of an instruction, a checklist, and a timetable to be given to the patient and filled in.

Category

Rehabilitation

2

Description

Control group: Perform common rehabilitation interventions such as use of splint, exercise therapy, recommendations for the correct way of doing activities of daily living (other than injecting or taking analgesics and steroids)

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Hospitals Affiliated to Tehran University of Medical Sciences

Full name of responsible person

Sahar Deyabadi

Street address

Enghelab ave

City

Tehran

Province

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65111-11489

Phone

+98 21 7753 3939

Email

sahar_deyabadi.ot89@yahoo.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Tehran University of Medical Sciences

Full name of responsible person

Parvin Raji

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Phone

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Email

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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

Tehran 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

Tehran University of Medical Sciences

Full name of responsible person

Parvin Raji

Position

Assistant professor

Latest degree

Ph.D.

Other areas of specialty/work

Occupational Therapy

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Person responsible for scientific inquiries

Contact

Name of organization / entity

Tehran University of Medical Sciences

Full name of responsible person

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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

Currently, the dissemination program for this project is the publication of the article.

When the data will become available and for how long

The next two years

To whom data/document is available

Researchers

Under which criteria data/document could be used

After acceptance, articles will be available to interested people .

From where data/document is obtainable

internet

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

There is no particular process.

Comments