Clinical Trial Protocol
Iranian Registry of Clinical Trials

18 Sep 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 envelops, 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)
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+98 21 7753 8798
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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

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+98 21 7753 3939

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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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Enghelab Ave

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praji@tums.ac.ir

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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Enghelab

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Postal code
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Person responsible for scientific inquiries

Contact

Name of organization / entity
Tehran University of Medical Sciences

Full name of responsible person
Parvin Raji

Position
Assistant professor

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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