

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Investigation of the effect of stretching of wrist and finger flexors on carpal tunnel syndrome in comparison to Acupuncture

#### Protocol summary

##### Study aim

Determining of the effect of stretching of wrist and finger flexors on carpal tunnel syndrome in comparison to acupuncture

##### Design

In this research, 62 patients with mild to moderate carpal tunnel syndrome that diagnosed by rehab specialist are chosen and patients are randomly divided into two control and intervention groups that allocate a code to each one.

##### Settings and conduct

Single blind (Primary questionnaire and NCV of patients done by one of the plan partner that had no information about description of patients on two groups then block randomization done by one of the anchors of the plan that have no information about the questionnaire and result of ncv. Then patient will evaluate by the plan partner that done primary ncv and questionnaire (plan partner have no information about interventional group) Interventional group defined by code 1 & 2 and statistic analyzer had no information about interventional group too. So statistic analyzer and Researcher evaluator have become blindness) patient in rehabilitation clinics of Shiraz University of Medical Sciences

##### Participants/Inclusion and exclusion criteria

Inclusion criteria: all the patients with mild to moderate carpal tunnel syndrome Age between 25 to 55 years old  
Exclusion criteria: Hypothyroidism Diabetes Pregnancy Lactation History of trauma or surgery on wrist Peripheral radiculopathy or neuropathy (except carpal tunnel syndrome)

##### Intervention groups

Intervention group consists 31 patients with cts that do stretching and the control group consists 31 patients with cts that do acupuncture

##### Main outcome variables

For choosing the best, more comfortable, low costs and less side effect for patients with carpal tunnel syndrome on function, symptoms, nerve conduction velocity and

compound muscle action potential. Primary outcome variable: Boston questionnaire of Signs and function of patients Secondary outcome variable: nerve conduction velocity (ncv) and (cmap)

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20170927036457N2**

Registration date: **2018-01-29, 1396/11/09**

Registration timing: **registered\_while\_recruiting**

Last update: **2018-01-29, 1396/11/09**

Update count: **0**

##### Registration date

2018-01-29, 1396/11/09

##### Registrant information

##### Name

Sara Sarikhani

##### Name of organization / entity

Shiraz University of Medical Sciences

##### Country

Iran (Islamic Republic of)

##### Phone

+98 938 887 9917

##### Email address

sarikhany@sums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

Thesis plan of Shiraz University of Medical Sciences

##### Expected recruitment start date

2017-10-15, 1396/07/23

##### Expected recruitment end date

2018-04-12, 1397/01/23

**Actual recruitment start date**

empty

**Actual recruitment end date**

empty

**Trial completion date**

empty

**Scientific title**

Investigation of the effect of stretching of wrist and finger flexors on carpal tunnel syndrome in comparison to Acupuncture

**Public title**

Investigation of the effect of stretching of wrist and finger flexors on carpal tunnel syndrome in comparison to Acupuncture

**Purpose**

Treatment

**Inclusion/Exclusion criteria****Inclusion criteria:**

The patient with mild to moderate carpal tunnel syndrom  
Age between 25 to 55

**Exclusion criteria:**

Hypothyroidism Diabetes Pregnancy Lactation History of truma or surgery on wrist Peripheral radiculopathy or neuropathy ( except carpal tunnle syndrome)

**Age**

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

**Gender**

Both

**Phase**

N/A

**Groups that have been masked**

- Outcome assessor
- Data analyser

**Sample size**

Target sample size: **62**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

Block randomization in the form of 4th blocks in the form of aabb without to consider time or place or sex.

**Blinding (investigator's opinion)**

Single blinded

**Blinding description**

Primary questionnaire and NCV of patients done by one of the plan partner that had no information about discription of patients on two groups then block randomization done by one of the anchors of the plan that have no information about the questionnaire and result of ncv. Then patient will evaluate by the plan partner that done primary ncv and questionnaire( plan partner have no information about interventional group) Interventional group defined by code 1 & 2 and estatistic analyzer had no information about interventional group too. So estatistic analyzer and Researcher evaluator have become blindness

**Placebo**

Not used

**Assignment**

Parallel

**Other design features****Secondary Ids**

empty

**Ethics committees****1****Ethics committee****Name of ethics committee**

Ethics committe of shiraz university of medical science

**Street address**

Rehab clinc of shiraz univercity of medical scince, shiraz city , zand street, shahid faghihi hospital, second floor

**City**

SHIRAZ

**Province**

Fars

**Postal code**

7134844119

**Approval date**

1997-09-23, 1376/07/01

**Ethics committee reference number**

lr.sums.med.rec.1396.45

**Health conditions studied****1****Description of health condition studied**

Carpal tunnel syndrome

**ICD-10 code**

G56.00

**ICD-10 code description**

Carpal tunnel syndrome, unspecified upper limb

**Primary outcomes****1****Description**

Nerve conduction improvement

**Timepoint**

Before intervention-after intervention-3 months after intervention

**Method of measurement**

Nerve conduction velocity

**Secondary outcomes****1****Description**

Decrease in symptoms of patients & improve of performance

**Timepoint**

Before intervention-after intervention-3 months after

intervention

#### Method of measurement

Boston questioner

### Intervention groups

#### 1

##### Description

Interventional group : estretching exercise : including 4 types of exercise that done every day about 3months and each day shod done 4 times thats about 20 seconds duration.1.the patient extend one hand to front and pull his finger with another hand that shod be estretch flexors muscles.2the patient should put his palmar surface on a desk and extend his elbow then should a little forward bending to estretch on flexors muscles.3.the patient should to stick palmar surfaces of both hand together and keep theme anterior of chest then push down to estrech on flexor muscles

##### Category

Rehabilitation

#### 2

##### Description

Control group: acupuncture including 10 sessiona that that each one about 30 minute and 3 sessions on a week

##### Category

Other

### Recruitment centers

#### 1

##### Recruitment center

###### Name of recruitment center

Rehabilitation clinics of shiraz university of medical science

###### Full name of responsible person

Sharare roshanzamir

###### Street address

Rehab clinc of shiraz university of medical sience of shiraz, second floor , shahid faghihi hospital, zand street, shiraz

###### City

Shiraz

###### Province

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###### Phone

+98 71 3231 9040

###### Email

Sharareh.roshanzamir@gmail.com

### Sponsors / Funding sources

#### 1

##### Sponsor

###### Name of organization / entity

Shiraz university of medical science

###### Full name of responsible person

Fateme zare

###### Street address

Marvdasht

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Marvdasht

###### Province

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###### Postal code

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###### Phone

+98 71 3231 9040

###### Email

Sharareh.roshanzamir@gmail.com

###### Grant name

###### Grant code / Reference number

###### Is the source of funding the same sponsor organization/entity?

Yes

###### Title of funding source

Shiraz university of medical science

###### 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

Shiraz University of Medical Sciences

###### Full name of responsible person

Sara sarikhani

###### Position

Medical student

###### Latest degree

Medical doctor

###### Other areas of specialty/work

Medical student

###### Street address

No.24, second floor, ave.24.narvan street.shiraz

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###### Web page address

## Person responsible for scientific inquiries

### Contact

**Name of organization / entity**

Shiraz University of Medical Sciences

**Full name of responsible person**

Sharare roshan zamir

**Position**

Specialist of rehabilitation

**Latest degree**

Specialist

**Other areas of specialty/work**

Rehabilitation management

**Street address**

Third floor , emam reza clinic, flake namazi , zand street, shiraz

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**Web page address**

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**Other areas of specialty/work**

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**Province**

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**Postal code**

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Mehrdad.neverhood@gmail.com

**Web page address**

## Sharing plan

**Deidentified Individual Participant Data Set (IPD)**

No - There is not a plan to make this available

**Justification/reason for indecision/not sharing IPD**

with the completion of this project in 1396 which dose not include the following items. if the journals editor requires the items mentioned, it will be provided to him/her. and the way of publication will be according to the opinion of the journal's editor

**Study Protocol**

No - There is not a plan to make this available

**Statistical Analysis Plan**

No - There is not a plan to make this available

**Informed Consent Form**

No - There is not a plan to make this available

**Clinical Study Report**

No - There is not a plan to make this available

**Analytic Code**

No - There is not a plan to make this available

**Data Dictionary**

No - There is not a plan to make this available

## Person responsible for updating data

### Contact

**Name of organization / entity**

Shiraz University of Medical Sciences

**Full name of responsible person**

Mehrdad dabiri

**Position**

Medical student

**Latest degree**