

Clinical Trial Protocol

Iranian Registry of Clinical Trials

16 Jul 2026

Effects of wrist limited dynamic splint on the upper extremity function of women with carpal tunnel syndrome

Protocol summary

Summary

In this study we have designed a wrist limited dynamic splint for women with mild or moderate carpal tunnel syndrome which allow the wrist to extends up to 15 degrees and flexes up to 15 degrees. The trait of this splint allows the patient to have treatment and do their activities of daily living at the same time. The subjects of both treatment and control group will be received the routine treatment of rehabilitation but just the treatment group will receive the splints. The results of this study would be scores of Boston carpal tunnel syndrome questionnaire, grip and pinch strength, dexterity purdue peg board test, sensory conductive velocity and sensory distal latency of median nerve. These tests will be performed before and after the 6 weeks treatment.

General information

Acronym

WLDS for CTS

IRCT registration information

IRCT registration number: **IRCT2015061522753N1**

Registration date: **2015-11-27, 1394/09/06**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2015-11-27, 1394/09/06

Registrant information

Name

Seyede Marjan Jaladat

Name of organization / entity

Tehran University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 917 634 6493

Email address

m-jaladat@razi.tums.ac.ir

Recruitment status

Recruitment complete

Funding source

Tehran University of Medical Sciences

Expected recruitment start date

2015-06-19, 1394/03/29

Expected recruitment end date

2016-02-20, 1394/12/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effects of wrist limited dynamic splint on the upper extremity function of women with carpal tunnel syndrome

Public title

Effects of wrist limited dynamic splint on carpal tunnel syndrome

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: the subjects gender should be female; the patients diagnosis should be carpal tunnel syndrome by a physiatrist doctor; the severity of illness should be mild or moderate; the subjects should be able to understand and do the orders of the tests. Exclusion criteria: history of surgery on the affected hand; systemic illnesses; pregnancy; subjects who do not cooperate; subjects who do not have the results of neural conductive tests.

Age

From **20 years** old to **60 years** old

Gender

Female

Phase

N/A

Groups that have been masked*No information***Sample size**Target sample size: **24****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**

Tehran University of Medical Sciences

Street addressTehran University of Medical Sciences, Qhods St.,
Keshavars boulevard**City**

Tehran

Postal code

1417614411

Approval date

2015-11-25, 1394/09/04

Ethics committee reference number

IR.TUMS.REC.1394.1272

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**

Function

Timepoint

Before and after the 6 weeks treatment

Method of measurement

Boston carpal tunnel syndrome questionnaire

2**Description**

Symptome severity

Timepoint

Before and after the 6 weeks treatment

Method of measurement

Boston carpal tunnel syndrome questionnaire

3**Description**

Grip strength

Timepoint

Before and after the 6 weeks treatment

Method of measurement

MIE digital device

4**Description**

Pinch strength

Timepoint

Before and after the 6 weeks treatment

Method of measurement

MIE digital device

5**Description**

Dexterity

Timepoint

Before and after the 6 weeks treatment

Method of measurement

Purduepeg board test

6**Description**

Median nerve sensory conductive velocity

Timepoint

Before and after the 6 weeks treatment

Method of measurement

MEDLEC SYNERGY VIASIS electromiography device

7**Description**

Median nerve distal sensory latency

Timepoint

Before and after the 6 weeks treatment

Method of measurement

MEDLEC SYNERGY VIASIS electromiography device

Secondary outcomes

empty

Intervention groups

1

Description

The treatment group would receive routine rehabilitation treatment beside the wrist limited dynamic splint

Category

Rehabilitation

2

Description

the control group would receive routine rehabilitation treatment without splint

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Shahid Faghihi hospital

Full name of responsible person

Seyede Marjan Jaladat

Street address

Zand street

City

Shiraz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Tehran University of Medical Sciences

Full name of responsible person

Mehdi Abdolvahab

Street address

Occupational therapy department, Rehabilitation school, Pich Shemiran

City

Tehran

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

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

Tehran University of Medical Sciences

Full name of responsible person

Seyede Marjan Jaladat

Position

MSc student

Other areas of specialty/work

Street address

Sixth st., Golestan boulevard, Tahmasebi street

City

Shiraz

Postal code

7145746598

Phone

+98 71 3225 5978

Fax

Email

jaladatot@gmail.com; m-jaladat@razi.tums.ac.ir

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity

Tehran University of Medical Sciences

Full name of responsible person

Seyede Marjan Jaladat

Position

BS of occupational therapy

Other areas of specialty/work

Street address

Sixth st., Golestan boulevard. Tahmasebi street.

City

Shiraz

Postal code

7145746598

Phone

+98 712255978

Fax

Email

jaladatot@gmail.com; m-jaladat@razi.tums.ac.ir;
marjanjaladatot87@yahoo.com

Web page address

Person responsible for updating data

Contact

Name of organization / entity

Tehran University of Medical Sciences

Full name of responsible person

Seyede Marjan Jaladat

Position

MSc student

Other areas of specialty/work

Street address

Sixth st., Golestan boulevard, Tahmasebi street

City

Shiraz

Postal code

7145746598

Phone

+98 712255978

Fax

Email

jaladatot@gmail.com; m-jaladat@razi.tums.ac.ir;

marjanjaladatot87@yahoo.com

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