Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

The effect of rehabilitation interventions based on the patient's condition, on the sensation, function and pain of patients with carpal tunnel syndrome after surgery

Protocol summary

Summary

This study is performed to evaluate the effect of rehabilitation process after surgery for carpal tunnel syndrome on function, sensation and pain. this clinical trial has been done in Iran Hand Rehabilitation Center in Tehran, on 30 patients undergoing median nerve release surgery, the intervention and control groups were divided into two groups by random cards.The intervention group receives rehabilitation treatment (the early motion), depending on the patient's condition. This rehabilitation process, depending on the patient's condition may include these items : scar reduction techniques , standard techniques to control edema, stretching exercises,range of motion exercises for involved and uninvolved joints, nerve and tendon gliding exercises, light and tolerable activities of daily living and tolerable tasks and activities related to patient's job and the control group (dressing) receives no intervention. Inclusion criteria was as fallows : patients with idiopathic CTS and people without a history of trauma and wrist injuries or previous surgery, exclusion criteria was injury or trauma during intervention, the Double Crush Syndrome and certain diseases such as rheumatoid arthritis, autoimmune and metabolic disorders. patients were evaluated for pain,sensation, function and power by VAS, Monofilament test, Boston Questionnaire and Vigorimeter by the researcher in three periods :preoperative period, 6 and 8 weeks after surgery to therefore this study was not blind.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2017041233390N1**
Registration date: **2017-07-07, 1396/04/16**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2017-07-07, 1396/04/16

Registrant information

Name
Roya Mahmoodi
Name of organization / entity
University of Social Welfare and Rehabilitation Sciences
Country
Iran (Islamic Republic of)
Phone
+98 21 2218 0037
Email address
ma.farzad@uswr.ac.ir

Recruitment status

Recruitment complete

Funding source

Investigator

Expected recruitment start date

2016-01-19, 1394/10/29

Expected recruitment end date

2017-01-19, 1395/10/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of rehabilitation interventions based on the patient's condition, on the sensation, function and pain of patients with carpal tunnel syndrome after surgery

Public title

The effect of rehabilitation on patients with carpal tunnel syndrome after surgery

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Patients with carpal tunnel syndrome is diagnosed by a specialist and NCV test and Phalen tests and tinnel sign be positive; patients with idiopathic CTS; people who do not experience trauma and ankle injuries or have not had previous surgery. Exclusion criteria: Injury or trauma during intervention; double Crush Syndrome; certain diseases such as rheumatoid arthritis, autoimmune and metabolic disorders

Age

No age limit

Gender

Female

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: **30**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

In this study randomization has done with random cards.

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of The University of Social Welfare and Rehabilitation Sciences

Street address

The University of Social Welfare and Rehabilitation Sciences, Kodakyar St, Daneshjo Blvd, Evin, Tehran, Iran

City

Tehran

Postal code

Approval date

2017-04-29, 1396/02/09

Ethics committee reference number

IR.USWR.REC.1396.1

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

Pain

Timepoint

Befor surgery and intervention, 6 weeks after intervention and surgery and 8 weeks after intervention and surgery

Method of measurement

Visual Analogue Scale

2

Description

Sensation

Timepoint

Befor surgery and intervention, 6 weeks after intervention and surgery and 8 weeks after intervention and surgery

Method of measurement

Semmes Weinstein Test of Monofilaments

3

Description

Function

Timepoint

Befor surgery and intervention, 6 weeks after intervention and surgery and 8 weeks after intervention and surgery

Method of measurement

Boston Questionnaire(function section)

4

Description

Hand power(tip pinch, key pinch, grip)

Timepoint

Befor surgery and intervention, 6 weeks after intervention and surgery and 8 weeks after intervention and surgery

Method of measurement

Vigorimeter

Secondary outcomes

1

Description

Symptoms

Timepoint

Befor surgery and intervention, 6 weeks after intervention and surgery and 8 weeks after intervention and surgery

Method of measurement

Boston Questionnaire(symptoms section)

Intervention groups

1

Description

Intervention group receives rehabilitation treatment (the early motion), depending on the patient condition, this rehabilitation, depending on the patient include scar reduction techniques, standard techniques to control edema, stretching exercises,range of motion exercises for involved and uninvolved joints, nerve and tendon gliding exercises, light and tolerable activities of daily living and tolerable tasks and activities related to the job.

Category

Rehabilitation

2

Description

The control group (dressing) do not receives any intervention. Actually this group recieves routine post-operative care such as dressing and recommendations for action, according to the doctor.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Iran Hand Rehabilitation Center

Full name of responsible person

Roya Mahmoodi

Street address

Iran Hand Rehabilitation Center, third floor, Corner of the Twelve Street, Yousef Abad, Tehran

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Full name of responsible person

Roya Mahmoodi

Street address

Department of Occupational Therapy, The University of Social Welfare and Rehabilitation Sciences, Kodakyar St, Daneshjo Blvd, Evin, Tehran, Iran

City

Tehran

Grant name

Grant code / Reference number

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

Yes

Title of funding source

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

The University of Social Welfare and Rehabilitation Sciences

Full name of responsible person

Roya Mahmoodi

Position

Master student of occupational therapy

Other areas of specialty/work

Street address

Department of Occupational Therapy, The University of Social Welfare and Rehabilitation Sciences, Kodakyar St, Daneshjo Blvd, Evin, Tehran, Iran

City

Tehran

Postal code

Phone

+98 21 2218 0037

Fax

Email

royamahmoodi95@yahoo.com

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity

The University of Social Welfare and Rehabilitation Sciences

Full name of responsible person

Maryam Farzad

Position

PhD candidate of occupational therapy, associated professor

Other areas of specialty/work

Street address

Department of Occupational Therapy, The University of Social Welfare and Rehabilitation Sciences,

Kodakyar St, Daneshjo Blvd, Evin, Tehran, Iran

City
Tehran

Postal code

Phone
+98 21 2218 0037

Fax

Email
ma.farzad@uswr.ac.ir; maryam_frzd@yahoo.com

Web page address

Person responsible for updating data

Contact

Name of organization / entity
The University of Social Welfare and Rehabilitation Sciences

Full name of responsible person
Roya Mahmoodi

Position
Master student occupational therapy

Other areas of specialty/work

Street address
Department of Occupational Therapy, The University of Social Welfare and Rehabilitation Sciences, Kodakyar St, Daneshjo Blvd, Evin, Tehran, Iran

City
Teharn

Postal code

Phone
00

Fax

Email
royamahmoodi95@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