Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 2026

The effect of acupressure on the clinical manifestations of Carpal Tunnel Syndrome (CTS)

Protocol summary

Summary

Objectives: Determine of the effect of acupressure on the clinical manifestations of Carpal Tunnel Syndrome (CTS). Design: Double blind clinical trial. Setting and conduct: The intervention is performed in three groups: Routine care, acupressure, and placebo. Acupressure is performed by Sea-Band as an elastic band with a plastic button in its below. It is considered to be some sort of acupressure when the Sea-Band button is placed on the P6 (Nei guan) point on the internal surface of forearm and on the P7 (Daling) point in the inner surface of transverse groove of wristt. On the other hand, it will be considered to have a placebo effect, when the Sea-Band button is placed on the opposite of P6 (Nei guan) point and P7 (Daling) point. The routine treatment including routine treatments measures (using a splint and analgesics). Participants: Inclusion criteria: The age of patients is 20-70 years; Carpal tunnel syndrome be diagnosed by orthopedic specialist; Symptoms lasting more than 3 months; Having no skin problem at the close Sea-Band site. Exclusion criteria: Patients with a history of wrist or median nerve trauma; CTS that are followed pregnancy, alcoholism, systemic diseases; Patients with a history of stroke and cerebral palsy; Illiterate Patients; Obese patients; Patients with a low level of consciousness; Patients who due to intensity of disease symptoms in during the study, surgical treatment or corticosteroid injections be necessary; Patients who can not tolerate Sea-Band. Intervention: Interventions including routine care, use of acupressure, and placebo that are done in three groups. Main outcome measures (variables): Clinical manifestations of Carpal Tunnel Syndrome.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201609178717N4**

Registration date: **2016-10-24, 1395/08/03**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2016-10-24, 1395/08/03

Registrant information

Name

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Name of organization / entity

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research of Semnan University of Medical Sciences

Expected recruitment start date

2016-10-22, 1395/08/01

Expected recruitment end date

2017-03-30, 1396/01/10

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of acupressure on the clinical manifestations of Carpal Tunnel Syndrome (CTS)

Public title
The effect of acupressure in the treatment of carpal tunnel syndrome
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria: The age of patients is 20-70 years; Carpal tunnel syndrome be diagnosed by orthopedic specialist; Symptoms lasting more than 3 months; Having no skin problem at the close Sea-Band site. Exclusion criteria: Patients with a history of wrist or median nerve trauma; CTS that are followed pregnancy, alcoholism, systemic diseases; Patients with a history of stroke and cerebral palsy; Illiterate Patients; Obese patients; Patients with a low level of consciousness; Patients who due to intensity of disease symptoms in during the study, surgical treatment or corticosteroid injections be necessary; Patients who can not tolerate Sea-Band.
Age
From **20 years** old to **70 years** old
Gender
Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **60**
Randomization (investigator's opinion)
Randomized
Randomization description
Blinding (investigator's opinion)
Double blinded
Blinding description
Placebo
Used
Assignment
Parallel
Other design features
Randomized blocks

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of Semnan University of Medical Sciences
Street address
Semnan University of Medical Sciences, Semnan, Semnan Province, Iran
City
Semnan
Postal code
3519899951
Approval date
2016-09-13, 1395/06/23
Ethics committee reference number
IR.SEMUMS.REC.1395.95

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
Distal sensory latency (DSL)
Timepoint
Before the intervention in the first session and after the intervention (after a month
Method of measurement
By EMG device

2

Description
Nerve conduction velocity (NCV)
Timepoint
Before the intervention in the first session and after the intervention (after a month)
Method of measurement
By EMG device

3

Description
Hand muscle strength (Grip power)
Timepoint
Before the intervention in the first session and after the intervention (after a month)
Method of measurement
By hand-held dynamometer device

4

Description
Clinical manifestations of Carpal Tunnel Syndrome (CTS)
Timepoint
Before the intervention in the first session and after the intervention (after a month)
Method of measurement
By Boston Carpal Tunnel Questionnaire (BCTQ)

5

Description
Pinch power
Timepoint

Before the intervention in the first session and after the intervention (after a month)

Method of measurement

by Digital dynamometer Device

6

Description

Distal motor latency (DML)

Timepoint

Before the intervention in the first session and after the intervention (after a month)

Method of measurement

By EMG device

Secondary outcomes

empty

Intervention groups

1

Description

The first intervention (the use of acupressure): In this group, acupressure is performed for a period of one month. For applying acupressure, the Sea-Band button is placed at all times day and night on the P6 (Nei guan) point on the internal surface of forearm to the width of 3-2 fingers up inside groove of wrist and on the P7 (Daling) point in the inner surface of transverse groove of wristt, between the tendons of palmaris longus and flexor carpi radialis. Pressure is applied so that the patient does not feel pain or discomfort. Boston Carpal Tunnel Questionnaire (BCTQ) to evaluate the clinical signs, EMG device to measure nerve conduction velocity (NCV), distal sensory latency (DSL), the distal motor latency (DML), and hand-held dynamometer device to measure grip strength (Grip power) of patients affected hand and digital dynamometer device to measure pinch strength (power Pinch) of patients affected hand fingers are used. Assessment and measurements will be done before the intervention in the first session and after the intervention (after a month). People in this group, the routine treatment (splint and analgesic drugs) will receive.

Category

Treatment - Other

2

Description

The second intervention (the use of the placebo): In this group, the placebo will be used for one month. For applying placebo, the Sea-Band button is placed at all times day and night on the external surface of patient forearm, on the opposite side the PC6 and PC7 (as a false point). Pressure is applied so that the patient does not feel pain or discomfort. Boston Carpal Tunnel Questionnaire (BCTQ) to evaluate the clinical signs, EMG device to measure nerve conduction velocity (NCV), distal sensory latency (DSL), the distal motor latency (DML), and hand-held dynamometer device to measure grip strength (Grip power) of patients affected hand and digital dynamometer device to measure pinch strength (power Pinch) of patients affected hand fingers are used. Assessment and measurements will be done before the intervention in the first session and after the intervention (after a month). People in this group, the routine treatment (splint and analgesic drugs) will receive.

Category

Placebo

3

Description

Third intervention (routine treatment in control group): People in this group, only the routine treatment (splint and analgesic drugs) will receive. Boston Carpal Tunnel Questionnaire (BCTQ) to evaluate the clinical signs, EMG device to measure nerve conduction velocity (NCV), distal sensory latency (DSL), the distal motor latency (DML), and hand-held dynamometer device to measure grip strength (Grip power) of patients affected hand and digital dynamometer device to measure pinch strength (power Pinch) of patients affected hand fingers are used. Assessment and measurements will be done in the first session and after a month.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Orthopedic doctor's office (Dr. Parviz Ahangar)

Full name of responsible person

Saeide Sadat Mosavinejad

Street address

Parviz Ahangar doctor's office, Ghomes doctors building, Street shahid Sabaghian, Semnan, Iran

City

Semnan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research of Semnan University of Medical Sciences

Full name of responsible person

Dr. Ali Rashidy-Pour

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Vice chancellor for research of Semnan University of Medical Sciences, Basij boulevard, Semnan, Iran

City

Semnan

Grant name

-

Grant code / Reference number

-

Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Vice chancellor for research of Semnan 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

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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