

Clinical Trial Protocol

Iranian Registry of Clinical Trials

16 Sep 2026

The Effects of Dry Needling on, Ultrasonographic features , Pain, Hand functional performance in Patients with Trigger Finger compare to the Control Group

Protocol summary

Summary

The aim of this study was to investigate the effects of dry needle and relative rest in infants with trigger finger. For this purpose, 60 patients with a trigger finger are randomly assigned to two groups of dry needles and rest group. All of these patients have symptoms of pain and tenderness in the A1 locus, and a sense of pain and disability during bending and tilting of the finger as well as a measurable mass. Touch in the tendon. The disease grade is ranked by the Quinell's grading system. The pulley thickness and tendon diameter are evaluated by an ultrasound machine before and one week after the intervention. Disability and handicap disorder is measured by the DASH questionnaire. The amount of pain is assessed by VAS. Grip and pinch strength are measured by dynamometer . In the intervention group, the location of the tendon prominence through the touch and, according to the country, the surface anatomical markings of the tendon are acupuncture needles of 16 mm diameter, 8 mm in three lateral medial directions, and in parallel with the tendon with a 45 ° angle of inclination and 10 turns in the direction And counterclockwise. In the control group, the patient is advised to reduce his activity and return to assessment for seven days. Changes in measurements before and after treatment are analyzed by spss software.

General information

Acronym

TF

IRCT registration information

IRCT registration number: **IRCT2015101024453N1**

Registration date: **2017-09-09, 1396/06/18**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2017-09-09, 1396/06/18

Registrant information

Name

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Name of organization / entity

Tehran university of medical sciences

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Recruitment status

Recruitment complete

Funding source

Rehabilitation school

Expected recruitment start date

2017-05-29, 1396/03/08

Expected recruitment end date

2017-08-30, 1396/06/08

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The Effects of Dry Needling on, Ultrasonographic features , Pain, Hand functional performance in Patients with Trigger Finger compare to the Control Group

Public title

The Effects of Dry Needling on the Trigger Finger

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: 1-Not having Fear of Needle 2- Getting in one of the three groups of trigger finger disorder (having three symptoms of pain and Tenderness at the position of A1 pulley, feeling pain and discomfort when flexing and extending finger, and nodule palpation 3. At least 4 weeks of history of the disease 4. Disorders of movement during finger movement 5. Did not have previous surgery in the affected area 6. The health of the proximal joints 7- Ability to perform the desired tests 8. No pacemaker 9) Absence of ulcers in the target area 10. Not having coagulation problems 11. Have Satisfaction to participate in the study and willingness to cooperate. 12. Do Not having rheumatoid arthritis. 13. Not taking analgesic and sedative medications after the onset of intervention 14. No drug use 16. The absence of neurological diseases Exclusion Criteria: 1. Any damage to the skin of the infection and trauma during the study 2. Unwillingness to continue cooperation 3. Perform any surgeries during the research 4. Fear of the needle during the intervention stages 5. Any trauma and fracture during the evaluation process 6. Any hematoma and edema

Age
From **30 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)
Not blinded

Blinding description

Placebo
Not used

Assignment
Single

Other design features
In this study, in addition to the examination of ultrasound of the tendon diameter and the thickness of the pulley, the effectiveness of the hand is measured through a questionnaire.

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Tehran University of Medical Sciences

Street address

The Committee on Ethics in the Research of the Faculty of Nursing and Midwifery and the Faculty of Rehabilitation, Ms. Zahra Tavakol

City

Tehran

Postal code

9123643003

Approval date

2017-05-29, 1396/03/08

Ethics committee reference number

IR.TUMS.FNM.REC.1396.2449

Health conditions studied

1

Description of health condition studied

Trigger finger

ICD-10 code

M65.3

ICD-10 code description

Trigger finger, Nodular tendinous disease

Primary outcomes

1

Description

Thickness of pulley

Timepoint

before and seven day after intervention

Method of measurement

Musculoskeletal ultrasonography in millimeters

2

Description

tendon Diameter

Timepoint

before and seven day after intervention

Method of measurement

Musculoskeletal ultrasonography in millimeters

3

Description

power of pinch

Timepoint

before and seven day after intervention

Method of measurement

Kilograms - pinch gauge

4

Description

Disabilities of the Arm, Shoulder and Hand

Timepoint

before and seven day after intervention

Method of measurement

Disabilities of Hand - DASH

5

Description

power of gripe

Timepoint

before and seven day after intervention

Method of measurement

Kilograms - dynamometer

6

Description

pain

Timepoint

before and seven day after intervention

Method of measurement

visual analog scale

7

Description

Quinnell grading

Timepoint

before and seven day after intervention

Method of measurement

Quinnell grading system

Secondary outcomes

1

Description

pain

Timepoint

Immediately after needling

Method of measurement

VAS

Intervention groups

1

Description

In the intervention group, Dry needling is done by the needle making company DongBang of South Korea. the location of the tendon prominence through the touch and, according to, the surface anatomical landmark . the tendon are acupuncture needles of 16 mm diameter, 8 mm in three lateral medial directions, and in parallel with the tendon with a 45 ° angle of inclination and 10 turns in the direction And counterclockwise. In the control group, the patient is advised to reduce his activity and return to assessment for seven days.

Category

Other

2

Description

Control group: Give enough time to the body to take care of the body repair. Provide advice to the patient to reduce the activity of his or her hands and not carry out heavy work for one week after the initial assessment.

Category

Lifestyle

Recruitment centers

1

Recruitment center

Name of recruitment center

Taleghani Educational Hospital, Shahid Beheshti University of Medical Sciences

Full name of responsible person

Mohamad Ali okhovatpour

Street address

Tabnak St. Velenjak Region, Chamran High Way, Tehran, Iran

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

School of Rehabilitation of Tehran University of Medical Sciences,

Full name of responsible person

Gholamreza Olyaei

Street address

Piche Shemiran, Enghelab Ave

City

Tehran

Grant name

32554

Grant code / Reference number

2232145

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

Yes

Title of funding source

School of Rehabilitation of 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

School of Rehabilitation of Tehran University of Medical Sciences

Full name of responsible person

Hosain Bagheri

Position

Professor

Other areas of specialty/work

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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