

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Evaluation of the results of vitamin C injection in flexor tendon repair in zone II

Protocol summary

Study aim

In this study, we investigate the use of vitamin C in flexor tendon repair and compare its complications and effectiveness with non-injection repair method.

Design

A clinical trial with a control group, with parallel randomized groups, was used to assign numbers to patients based on random number table numbers for randomization.

Settings and conduct

The surgeon and the patient are aware of the methods of surgical treatment, but the person who performs the patients' functional measurements after surgery is blind to the type of surgical procedure of the patients.

Participants/Inclusion and exclusion criteria

Patient with a laceration in zone 2; immune system defects; patients with concomitant fractures; patients with crush injury; patients with a closed tendon injury

Intervention groups

In this study, we will repair tendon damage in group A using vitamin C injections and group B without injections.

Main outcome variables

Success rate and range of motion are the main results

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20211201053235N7**

Registration date: **2022-06-25, 1401/04/04**

Registration timing: **prospective**

Last update: **2022-06-25, 1401/04/04**

Update count: **0**

Registration date

2022-06-25, 1401/04/04

Registrant information

Name

Meisam Jafari Kafiabadi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 21 2271 8000

Email address

dr.jafari8567@yahoo.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2022-07-23, 1401/05/01

Expected recruitment end date

2023-07-23, 1402/05/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation of the results of vitamin C injection in flexor tendon repair in zone II

Public title

Flexor tendon repair in zone II

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Patients with tendon injury in zone 2

Exclusion criteria:

Immune system defects Close tendon injury Crush injury Concomitant fracture

Age

From **20 years** old

Gender

Both

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: 30

Randomization (investigator's opinion)

Not 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**

Ethical Committee of Shahid Beheshti University of Medical Sciences

Street address

Arabi Ave., Daneshjoo Blvd., Velenjak, Tehran, Iran

City

Tehran

Province

Tehran

Postal code

19839631113

Approval date

2022-04-24, 1401/02/04

Ethics committee reference number

4.1401.REC.RETECH.SBMU.IR

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

Tendon injury

ICD-10 code

S60

ICD-10 code description

Superficial injury of wrist, hand and fingers

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

Range of motion

Timepoint

3 months after surgery

Method of measurement

Examination by a surgeon

2**Description**

Tendon rupture

Timepoint

2 weeks and 3 months after surgery

Method of measurement

Examination by a surgeon

Secondary outcomes

empty

Intervention groups**1****Description**

Intervention group: Patients with laceration in zone 2 of the hand, after repairing the flexor tendon and closing the wound, 5 cc of vitamin C is injected at the site of repair and then plaster cast is performed. The next day after surgery, the passive flexion and active extension movements for the patients begin, and 5 weeks later, the patient's cast was opened and physiotherapy is requested.

Category

Treatment - Surgery

Recruitment centers**1****Recruitment center****Name of recruitment center**

Shohada e Tajrish Hospital

Full name of responsible person

Meisam Jafari Kafiabadi

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

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Full name of responsible person

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Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

No

Title of funding source

Research affairs of Shahid Beheshti University of Medical Sciences

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**

Shahid Beheshti University of Medical Sciences

Full name of responsible person

Meisam Jafari Kafiabadi

Position

Assistant professor

Latest degree

Medical doctor

Other areas of specialty/work

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Farsad biglari

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Yes - There is a plan to make this available

Data Dictionary

Yes - There is a plan to make this available

Title and more details about the data/document

After finishing patient recruitment

When the data will become available and for how

long

After finishing patient recruitment

To whom data/document is available

After finishing patient recruitment

Under which criteria data/document could be used

After finishing patient recruitment

From where data/document is obtainable

After finishing patient recruitment

What processes are involved for a request to access data/document

After finishing patient recruitment

Comments