Clinical Trial Protocol
Iranian Registry of Clinical Trials

18 Sep 2026

Comparison of ultrasound guided local injections of dextrose and corticosteroid efficacy on pain and daily activity of patients with chronic plantar fasciitis

Protocol summary

Summary

In this study we compare effects of dextrose and corticosteroid on pain and daily activity of patients with plantar fasciitis.Patients suffering from heel pain with a VAS(Visual Analogue Scale) more than 4 for at least two months whose history,physical exam and sonography confirm plantar faciitis are included. A history of direct trauma; systemic inflamatory or soft tissue diseases; disk herniation with S1 radiculopathy; gout; diabetes melitus;surgury or injection in fascia since 6 months ago, existence of cyst/mass in pain site; coincidence of paresthesia or numbness; coagolupathy; pregnancy; hypersensitivity to corticosteroids; infection of injection site, posterior heel pain and any treatment for the condition since 4 weeks ago are exclusion criterias. Patients will be randomized with a simple randomization method in two intervention groups. One group will be injected with 2 cc of dextrose 20% and the other with a combination of 1 cc of methylprednisolone 40 mg and 1 cc of saline 0.9%, both in plantar fascia under an ultrasound guide.Anesthesia will be induced by 1 cc of lidocain 1% and a 22 gauged needle.A resident of physical medicine and rehabilitation who is blind toward the injected drugs will evaluate the patients at the base time, 2 weeks and 8 weeks following the injection.The evaluation will be done for efficacy on pain by VAS and on daily activity by FAAM questionaire.Thickness of plantar fascia will be determined by sonography. Finally the collected data from two groups will be compared.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015041321744N1**
Registration date: **2015-06-01, 1394/03/11**
Registration timing: **prospective**
Last update:
Update count: **0**

Registration date

2015-06-01, 1394/03/11

Registrant information

Name

Amin Arbabi

Name of organization / entity

Iran university of medical science

Country

Iran (Islamic Republic of)

Phone

+98 21 7713 6756

Email address

arbabiamin0123@yahoo.com

Recruitment status

Recruitment complete

Funding source

Vice Chancellor for research of Iran University Of Medical Science, Dr Eftekhar Ardebili

Expected recruitment start date

2015-06-05, 1394/03/15

Expected recruitment end date

2015-10-07, 1394/07/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of ultrasound guided local injections of dextrose and corticosteroid efficacy on pain and daily activity of patients with chronic plantar fasciitis

Public title

Effects of dextrose and corticostroid on plantar fasciitis treatment

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion: a history of plantar fasciitis;heel pain for more than 2 months with a VAS(visual Analogue Scale) more than 4;fascia hypoechogenisity and thickness more than 4 mm in sonography exclusion:a history of direct trauma; positive tinnel sign; a history of systemic inflamatory or soft tissue diseases; disk herniation with S1 radiculopathy; a history of gout; diabetes melitus; a history of surgury or injection in fascia since 6 months ago, existence of cyst/mass in pain site; coincidence of paresthesia or numbness; coagolupathy; pregnancy; hypersensitivity to corticosteroids; infection of injection site, posterior heel pain; any treatment for the condition since 4 weeks ago; patients who receive physiotherapy, splint, Ionophoresis and shockwave during 2 months after injection

Age

From **18 years** old to **75 years** old

Gender

Both

Phase

2-3

Groups that have been masked

No information

Sample size

Target sample size: **40**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Triple blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Iran University Of Medical Sience

Street address

Iran University Of Medical Science, Hemmat Freeway, next to Milad Hospital

City

Tehran

Postal code

Approval date

2014-09-03, 1393/06/12

Ethics committee reference number

105/2741/93/د

Health conditions studied

1

Description of health condition studied

Plantar fasciitis

ICD-10 code

XIII

ICD-10 code description

Diseases of the musculoskeletal system and connective tissue

Primary outcomes

1

Description

Pain

Timepoint

Before injection, 2 weeks and 8 weeks after injection

Method of measurement

Visual Analog Scale(VAS)

2

Description

Daily living and sport activity

Timepoint

before injection,2 weeks and 8 weeks after injection

Method of measurement

FAAM questionaire

Secondary outcomes

1

Description

Thickness of plantar fascia

Timepoint

before injection, 2 weeks and 8 weeks after injection

Method of measurement

sonography

Intervention groups

1

Description

First intervention group: injection 0f a combination of 1 cc methylprednisolone 40 mg and 1 cc salin 0.9%

Category

Treatment - Drugs

2

Description

Second intervention group: injection of 2 cc of dextrose 20%

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center
Firoozgar Hospital

Full name of responsible person
Amin Arbabi

Street address
Valiasr square, Behafarin Avenue, Firoozgar hospita, Physical medicine and rehabilitation wardl

City
Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Vice Chancellor for research of Iran University Of Medical Science

Full name of responsible person
Dr Eftekhar Ardebili

Street address
Next to Milad hospital, Hemmat Autobahn

City
Tehran

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 Iran University Of Medical Science

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
Firoozgar hospital

Full name of responsible person
Amin Arbabi

Position
Resident of physical medicine and rehabilitation

Other areas of specialty/work

Street address
Firoozgar hospital, Behafarin Avenue, Valiasr Square

City
Tehran

Postal code

Phone
+98 21 8214 1612

Fax

Email
arbabiamin0123@yahoo.com

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity
Firoozgar Hospital

Full name of responsible person
Dr Gholamreza Raissi

Position
Associate professor of physical medicine and rehabilitation

Other areas of specialty/work

Street address
Firoozgar hospital, Behafarin Avenue, Valiasr Square

City
Tehran

Postal code

Phone
+98 21 8214 1612

Fax

Email
grezaraissi@yahoo.com

Web page address

Person responsible for updating data

Contact

Name of organization / entity
Firoozgar hospital

Full name of responsible person
Amin Arbabi

Position
Resident of physical medicine and rehabilitation

Other areas of specialty/work

Street address
Firoozgar hospital, behafarin Avenue, Valiasr Square

City
Tehran

Postal code

Phone
+98 21 8214 1612

Fax

Email
arbabiamin0123@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