

Clinical Trial Protocol

Iranian Registry of Clinical Trials

12 Sep 2026

A clinical trial on the effect of ultrasound guidance on local analgesic block of the posterior tibial nerve

Protocol summary

Summary

Objective: to compare the effectiveness of ultrasound guidance in local analgesic block of the posterior tibial nerve. Design: a block-randomized, not blinded clinical trial. Study population: patients requiring posterior tibial nerve blocks. Inclusion criteria: age over 18 years, isolated trauma in posterior tibial nerve, and lack of previous ankle deformity. Exclusion criteria: multiple trauma, ankle injury, and previous history of consumption of analgesics. Sample size: 80 cases. Study intervention: the control group received the common methods (i.e., anatomical landmarks) for posterior tibial nerve block. On the other hand, the intervention group was administered posterior tibial nerve blocks using ultrasound guidance. In this method, the anesthetic drug was injected near the nerve causing pain. Study outcome: evaluation and comparison of anesthesia level and duration based on Visual Analogue Scale and Quality Block (i.e., sensory and motor block), based on cold and pinprick, 15 and 30 minutes after the intervention in both the intervention and control groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2017041733477N1**

Registration date: **2017-06-01, 1396/03/11**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2017-06-01, 1396/03/11

Registrant information

Name

Reza Ahmadi

Name of organization / entity

Mashhad University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 51 3841 3007

Email address

ebrahimimn@mums.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice Chancellor for Research, Mashhad University of Medical Sciences

Expected recruitment start date

2017-05-22, 1396/03/01

Expected recruitment end date

2018-05-22, 1397/03/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

A clinical trial on the effect of ultrasound guidance on local analgesic block of the posterior tibial nerve

Public title

The effect of ultrasound guidance on local analgesic block

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: age over 18 years, isolated trauma in posterior tibial nerve, and lack of previous ankle deformity. Exclusion criteria: multiple trauma, ankle injury, and previous history of consumption of analgesics.

Age

From **18 years** old

Gender

Both

Phase

2

Groups that have been masked*No information***Sample size**Target sample size: **80****Randomization (investigator's opinion)**

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**

Ethics Committee of Mashhad University of Medical Sciences

Street address

Vice Chancellor for Research, Mashhad University of Medical Sciences, Ghoreishi building, Daneshgah Street

City

Mashhad

Postal code**Approval date**

2016-03-27, 1395/01/08

Ethics committee reference number

IR.MUMS.fm.REC.1395.234

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

Injury of nerves at ankle

ICD-10 code

S94

ICD-10 code description

Injury of nerves at ankle and foot level

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

Pain

Timepoint

15 and 30 minutes after intervention

Method of measurement

Based on Visual Analogue Scale (VAS)

2**Description**

Analgesic duration

Timepoint

After intervention

Method of measurement

Minutes

Secondary outcomes**1****Description**

Quality of nerve blocks (i.e., sensory and motor block)

Timepoint

15 and 30 minutes after intervention

Method of measurement

Physical examination

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

The intervention group: Who was administered posterior tibial nerve blocks using ultrasound guidance. In this method, the anesthetic drug is injected near the nerve, causing pain.

Category

Treatment - Other

2**Description**

The control group: Who received the common methods (i.e., anatomical landmarks) for posterior tibial nerve block.

Category

Treatment - Other

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

Emam Reza Hospital

Full name of responsible person

Reza Ahmadi

Street address

Imam Reza Hospital, Imam Reza Square, Ibn Sina Street

City

Mashhad

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice Chancellor for Research, Mashhad University of Medical Sciences

Full name of responsible person

Mohsen Tafaghodi

Street address

Vice Chancellor for Research, Mashhad University of Medical Sciences, Ghoreishi building, Daneshgah Street

City

Mashhad

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, Mashhad 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

Mashhad University of Medical Sciences

Full name of responsible person

Mohsen Ebrahimi

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Emergency Medicine

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