Clinical Trial Protocol
Iranian Registry of Clinical Trials

10 Jun 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

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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
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Person responsible for updating data

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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