Clinical Trial Protocol
Iranian Registry of Clinical Trials

18 Sep 2026

The comparison of Radial,Ulnar and Median nerve block success with and without sonographic guide for pain control in emergency department

Protocol summary

Summary

Purpose: Comparison of hand nerve block success in order to pain management in emergency department with and without sonography. Type of study: Randomize clinical trial single blind for patients. Sample: All patients over 18 years old with isolated hand trauma. Patients will exclude from the study if they have previous hand deformity or other trauma or analgesic usage or dissatisfaction to join the study. Main intervention: Nerve block with sonography. Studying results: The success rate of nerve block (according to the numbness of blocked nerve with sense examination) and patient satisfaction. Method: Patients will divide in to 2 groups alternately. Sample size for each group is 143 patients. In one group, in a sterile situation the nerve will be blocked under sonographic guide and in the other group, the nerve will be localized with anatomical landmarks and will be blocked in sterile situation. The success of nerve block will be assessed by pinprick test. Nerve block will be unsuccessful if the patient sense the needle over his or her skin and then other type of indolence will be used for the patient. These patients will not be excluded from the final analysis and will be remained in their group. Patient's information will be recorded in designed questionnaire.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016090329677N1**
Registration date: **2017-02-16, 1395/11/28**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2017-02-16, 1395/11/28

Registrant information

Name
Toktam Mohammadi Rana
Name of organization / entity
Mashhad University of Medical Science
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Iran (Islamic Republic of)
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Recruitment status

Recruitment complete

Funding source

governmental

Expected recruitment start date

2016-11-21, 1395/09/01

Expected recruitment end date

2017-05-22, 1396/03/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The comparison of Radial,Ulnar and Median nerve block success with and without sonographic guide for pain control in emergency department

Public title

Hand nerves block with and without sonographic guide for pain control

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Age over 18; Isolated hand deformity; No previous hand deformity Exclusive criteria: Multiple trauma; Analgesic usage for any reason; Wound at the

site of nerve block; Dissatisfaction to join the study

Age

From **18 years** old to **139 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **286**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Single blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics of Mashhad University of Medical Science

Street address

Daneshgah St. Next to Hoveyzeh Cinema. Medical University of Mashhad. Technical and Investigation Faculty

City

Mashhad

Postal code

Approval date

2016-05-29, 1395/03/09

Ethics committee reference number

1394.685

Health conditions studied

1

Description of health condition studied

Local nerve block

ICD-10 code

S60,S61,S6

ICD-10 code description

INJURIES TO THE WRIST AND HAND

Primary outcomes

1

Description

Painlessness

Timepoint

10 min after block

Method of measurement

Revision of painlessness with Pinprick test

Secondary outcomes

empty

Intervention groups

1

Description

Local Median, Radial and Ulnar nerves block with Lidocain 2% after localizing the nerve with sonography

Category

Treatment - Other

2

Description

Local Median, Radial and Ulnar nerves block with Lidocain 2% after localizing the nerve with anatomical landmarks

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Emam reza Hospital

Full name of responsible person

Dr Toktam Mohammadi Rana

Street address

City

Mashhad

2

Recruitment center

Name of recruitment center

Hasheminezhad Hospital

Full name of responsible person

Dr Toktam Mohammadi Rana

Street address

Vahid St.

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Vice Chancellor for Research of Mashhad University of Medical Sciences
Full name of responsible person
Dr Mohsen Tafaghodi
Street address
Vice Chancellor for Research, Mashhad University of Medical Sciences, Next to Hoveyzeh Cinema, Daneshgah St
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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 of 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
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Person responsible for scientific inquiries

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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