

Clinical Trial Protocol

Iranian Registry of Clinical Trials

12 Jul 2026

Comparison of post operative analgesic effect of adding Dexmedetomidine or dexamethasone to lidocaine through infraclavicular block in forearm surgery.

Protocol summary

Summary

The purpose of this study is evaluation the effects of Dexmedetomidine and dexamethasone as Local anesthetic adjuvant on the onset and duration of Infraclavicular Brachial plexus block under sonography guided technique. This study is a one centric randomized controlled trial that will be implemented on 75 patients 20-60 years old candidate for elective elective forearm surgeries with Infraclavicular Brachial plexus block that are scheduling in class 1 and 2 Society of Anesthesiology America. Patients will be divided into three 25 groups by simple randomized method (closed packet and the selection of painted cards). in group1:28 cc lidocaine 1.5% plus 2cc distilled water, group2:28 cc lidocaine 1.5% plus 8mg Dexamethasone and group3:28 cc lidocaine 1.5% plus 1µgr/kg Dexmedetomidine will administer. In three groups, sensory and motor block onset time and duration of them, hemodynamic Variables, pain severity (VAS Score) and administration of analgesics and overall analgesic requirement within in 2, 4 and 6 hours after infraclavicular block will be assessed.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016011423473N2**
Registration date: **2016-06-06, 1395/03/17**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2016-06-06, 1395/03/17

Registrant information

Name

Siamak Yaghuobi

Name of organization / entity

Qazvin University of Medical Sciences & Health Services

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Recruitment status

Recruitment complete

Funding source

Vice Chancellor for research Qazvin University of Medical Sciences

Expected recruitment start date

2015-09-23, 1394/07/01

Expected recruitment end date

2016-09-22, 1395/07/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of post operative analgesic effect of adding Dexmedetomidine or dexamethasone to lidocaine through infraclavicular block in forearm surgery.

Public title

Comparison of post-operative analgesic effect of adding Dexmedetomidine or dexamethasone to lidocaine through local anastasia in forearm surgery

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: Patients 20–60 years old; with American Society of Anesthesiologists (ASA) physical status I or II; scheduled for elective forearm surgery.
Exclusion criteria: Presence of underlying diseases such as coagulopathy, peripheral vascular diseases and neuropathy; patient's avoidance; any history of allergy to local anesthetics; treatment with palliative drugs and those affecting the CNS; addiction; neurologic deficit in respective organ; infection in the site of injection; pregnancy; BMI<20 & BMI>40; the use of drugs which interfere with lidocaine such as beta blockers, cimetidine, phenytoin.

Age

From **20 years** old to **60 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **75**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of the University of Medical Sciences

Street address

Qazvin, Shahid Bahrar Blvd

City

Qazvin

Postal code

3419759811

Approval date

2016-01-10, 1394/10/20

Ethics committee reference number

IR.QUMS.REC.1394.278

Health conditions studied

1

Description of health condition studied

Forearm laceration

ICD-10 code

S54, S56

ICD-10 code description

Injury of nerves at forearm level, Injury of muscle and tendon at forearm level

Primary outcomes

1

Description

Pain

Timepoint

In 2, 4 and 6 hours after infraclavicular block

Method of measurement

Visual analogue Scales(VAS)

2

Description

Total analgesic dose administered

Timepoint

During 6 hrs after the infraclavicular block (With interval 2hrs)

Method of measurement

Patient file

Secondary outcomes

1

Description

Onset of sensory and motor block

Timepoint

From the start of anesthetics injection

Method of measurement

Evaluate the patient's response to needle hitting on surgical site and gripping force

2

Description

Time of duration of sensory block

Timepoint

The time interval between the time of loss of pain sensation at forearm to reappearance of paresthesia

Method of measurement

Pin-prick test

3

Description

Hemodynamic variables of the block

Timepoint

In 5, 10, 15, 20 and 30 minutes after infraclavicular block

Method of measurement

Monitoring system

4

Description

Time of duration of motor block

Timepoint

The time interval between the time of loss of pain sensation at forearm to complete recovery of motor function.

Method of measurement

Gripping force test

Intervention groups

1

Description

In group 1, 28 cc lidocaine 1.5% plus 2cc distilled water will administer.

Category

Placebo

2

Description

In group 2, 28 cc lidocaine 1.5% plus 8mg Dexamethasone will administer

Category

Prevention

3

Description

In group 3, 28 cc lidocaine 1.5% plus 1µgr/kg Dexmedetomidine will administer.

Category

Prevention

Recruitment centers

1

Recruitment center

Name of recruitment center

Rajee Hospital

Full name of responsible person

Dr. Hoda Shehamat

Street address

Rajee Hospital, Padegan Avenu, Qzvin.

City

Qazvin

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice Chancellor for research Qazvin University of Medical Sciences

Full name of responsible person

Dr. Taghi Naserpour

Street address

Qazvin, Shahid Bahonar Blvd

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Qazvin

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 Qazvin 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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Full name of responsible person

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Position

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Person responsible for scientific inquiries

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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