

Clinical Trial Protocol

Iranian Registry of Clinical Trials

11 Jul 2026

The effect of magnesium sulfate on postoperative pain in upper limb surgeries by supraclavicular block under ultrasonic guide.

Protocol summary

Summary

This randomized controlled, double blind study will be done after approval by the ethical committee of Ahvaz Jundishapoor University of Medical Sciences and taking the clinical randomized trial code from the IRCT center. 52 patients candidate for elective surgeries of upper limb admitted in trauma center of Imam Khomeini hospital in Ahvaz will be studied. After obtaining the written informed consent from patients, they will be randomly allocated into 2 groups A & B. Under standard monitoring and IV access patients will receive oxygen with face mask, fluid and premedication with sedative drugs. The supraclavicular brachial plexus block will be performed using ultrasonographic guide with anesthesiologist. Group A will receive solution of Lidocaine plus magnesium sulfate and group B will receive Lidocaine plus normal saline. The anesthesiology resident who did not know about the pharmaceutical composition and patient groups, will assess the sensory and motor block, vital signs and postoperative pain, and will complete the questionnaire. Sensory block level will be assessed by pinprick testing dermatomes of sensory regions with using 3-point scale. The intensity of motor block will be assessed using the modified Bromage scale. During surgery ECG, HR, NIBP and oxygen saturation will be monitored and written every 15 minutes. Postoperative pain will be assessed using VAS score at 0, 1, 2, 4, 8, 16 & 24 hours after surgeries. Patients with VAS > 3 will receive analgesic as meperidine 25 mg/IM. The side effects will be assessed during surgeries and 24 hours after them.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016051727954N1**

Registration date: **2016-06-19, 1395/03/30**

Registration timing: **prospective**

Last update:

Update count: **0**

Registration date

2016-06-19, 1395/03/30

Registrant information

Name

Mohsen Davarimoghadam

Name of organization / entity

Ahvaz Jundishapoor University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 61 3222 0168

Email address

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Recruitment status

Recruitment complete

Funding source

Ahvaz Jundishapoor University of Medical Sciences

Expected recruitment start date

2016-06-21, 1395/04/01

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

The effect of magnesium sulfate on postoperative pain in upper limb surgeries by supraclavicular block under ultrasonic guide.

Public title

The effect of magnesium sulfate on postoperative pain

Purpose

Treatment

Inclusion/Exclusion criteria

inclusion:ASAclass1&2 exclusion:patient reffuse,hypersensitivity to drugs used in study,coagulation abnormality,infection in the site of injection,traumatic nerve injury and need for general anesthesia

Age

From **18 years** old to **65 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **52**

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 Ahvaz Jundishapoor University of Medical Sciences

Street address

Golestan

City

Ahvaz

Postal code

6135715794

Approval date

2016-04-23, 1395/02/04

Ethics committee reference number

IR.AJUMS.REC.1395.61

Health conditions studied

1

Description of health condition studied

pain

ICD-10 code

18

ICD-10 code description

Acute pain

Primary outcomes

1

Description

Post Operation Pain

Timepoint

0,1,2,4,8,16,24 hour

Method of measurement

Visual Analoge Scale

Secondary outcomes

1

Description

Sensory block

Timepoint

1minute

Method of measurement

Pinprick

2

Description

Motor block

Timepoint

2minute

Method of measurement

Modified Bromage Scale

Intervention groups

1

Description

intervention group:lidocain1% 35ml+magnesium sulfate1gr as 5ml

Category

Treatment - Drugs

2

Description

control goup: lidocain1%35ml+salin normal 5ml

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Imam Khomeini Hospital

Full name of responsible person

Mohsen Davarimoghadam

Street address

Golestan

City

Ahvaz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice Chancellor for Research of Ahvaz Jundishapoor
University of Medical Sciences

Full name of responsible person

Behzad Sharif Makhmalzade

Street address

Golestan

City

Ahvaz

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 Ahvaz Jundishapoor
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**

Ahvaz Jundishapoor University of Medical Sciences

Full name of responsible person

Mohsen Davarimoghadam

Position

Anesthesiology Resident

Other areas of specialty/work**Street address**

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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