

Clinical Trial Protocol

Iranian Registry of Clinical Trials

09 Jun 2026

The Effect of Lidocaine, Magnesium Sulfate and Ketamine on the Pain of Propofol Intravenous Injection

Protocol summary

Summary

The current protocol was aimed to compare effects of three drugs such as Lidocaine, Magnesium sulfate and Ketamine on the pain of Propofol intravenous injection. Patients needed anesthesia divided into four groups including Lidocaine (L), Ketamine (K), Magnesium sulfate (MS) and Normal saline (NS). Eighty patients conducted in this survey. This study was double blind that anesthesiologist who was unaware of the contents of the syringe. Also, the specialist assessing pain was not aware of patients assigned to groups. Patients were allocated in to 4 groups using block allocation method. All patients were provided by Normal Saline prior to induction and venipuncture was also done from upper limb distal using vein catheter no 18 and anesthesia methods were similar for all groups. Groups L, K, MS, and NS received respectively 40 mg Lidocaine, 25 mg Ketamine, 1 gr Magnesium Sulfate, and 5 ml Normal Saline. Inclusion criteria were as follow: 1) people aged 18-65 years that categorized into class 1 and 2 based on America Society of Anesthesiologists (ASA. Exclusion criteria were considered as: 1) having allergies or symptoms of heart disease. To measure pain, Verbal Rating Scale was used (0= no pain, 1= low pain, 2= moderate, and 3= severe pain).

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016051410340N10**
Registration date: **2016-07-01, 1395/04/11**
Registration timing: **na**

Last update:

Update count: **0**

Registration date

2016-07-01, 1395/04/11

Registrant information

Name

Mohammad Aryaie

Name of organization / entity

Golestan University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 911 277 1798

Email address

aryaie@goums.ac.ir

Recruitment status

Not enough for processing

Funding source

Golestan University of Medical Science

Expected recruitment start date

2015-03-20, 1393/12/29

Expected recruitment end date

2006-03-20, 1384/12/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The Effect of Lidocaine, Magnesium Sulfate and Ketamine on the Pain of Propofol Intravenous Injection

Public title

Pain of Propofol Intravenous Injection

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: people aged 18-65 years that categorized into class 1 and 2 based on America Society of Anesthesiologists (ASA); hypertension between 90 and 140 until 24 hours before surgery; lack of neurological disorders, kidney and liver failure; lack of drug allergy;

no history of allergy to eggs or anaphylaxis. Exclusion criteria were considered as: having allergies or symptoms of heart disease and arrhythmias; saturation drops below 90%; operation duration more than 3 hours.

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: **80**

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

Ethic Committee of Golestan University of Medical Science

Street address

4 Kilometer of Gorgan-sari Road, Falsafi educational campus, Vice Chancellor of Technology and Information, Gorgan

City

Gorgan

Postal code

Approval date

2010-08-20, 1389/05/29

Ethics committee reference number

3107869312242

Health conditions studied

1

Description of health condition studied

pain

ICD-10 code

M79.6

ICD-10 code description

Pain in limb

Primary outcomes

1

Description

Pain

Timepoint

After intervention

Method of measurement

Verbal Rating Scale

Secondary outcomes

1

Description

Hemodynamic Change

Timepoint

Before Intervention, 1,3 and 5 minutes after intervention

Method of measurement

Sphygmomanometer, Puls oximeter

Intervention groups

1

Description

40 mg Lidocaine was intravenously administered as a premedication before propofol injection

Category

Prevention

2

Description

25 mg Ketamine was intravenously administered as a premedication before propofol injection

Category

Prevention

3

Description

1 gr Magnesium sulfate was intravenously administered as a premedication before propofol injection

Category

Prevention

4

Description

5 ml Normal saline was intravenously administered as a premedication before propofol injection

Category

Prevention

Recruitment centers

1

Recruitment center

Name of recruitment center

5 Azar Hospital

Full name of responsible person

Peyman Asghari

Street address

5 Azar Hospital, 5 Azar Street, Gorgan City, Golestan Province

City

Gorgan

Fax

Email

homeira_khoddam@yahoo.com

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity

Golestan University of Medical Sciences

Full name of responsible person

Peiman Asghari

Position

Anesthesia Specialist

Other areas of specialty/work

Street address

4 Kilometer of Gorgan-sari Road, Falsafi educational campus, Vice Chancellor of Technology and Information, Gorgan

City

Gorgan

Postal code

Phone

+98 17 3242 4256

Fax

Email

paymanasghari5@gmail.com

Web page address

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Golestan University of Medical Science

Full name of responsible person

Homeira Khodam

Street address

4 Kilometer of Gorgan-sari Road, Falsafi educational campus, Vice Chancellor of Technology and Information, Gorgan

City

Gorgan

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Golestan University of Medical Science

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

Golestan University of Medical Science

Full name of responsible person

Homeira Khodam

Position

Research and Technolgy Managment

Other areas of specialty/work

Street address

4 Kilometer of Gorgan-sari Road, Falsafi educational campus, Vice Chancellor of Technology and Information, Gorgan

City

Gorgan

Postal code

Phone

+98 17 3242 4377

Person responsible for updating data

Contact

Name of organization / entity

Golestan University of Medical Sciences

Full name of responsible person

Mohamma Aryaied

Position

MSc in Epidemiology

Other areas of specialty/work

Street address

4 Kilometer of Gorgan-sari Road, Falsafi educational campus, Vice Chancellor of Technology and Information, Gorgan

City

Postal code

Phone

+98 17 3242 4377

Fax

Email

aryaie@goums.ac.ir

Web page address

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