Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Determination of the low dose ephedrine and lidocaine effect on pain and hemodynamic changes due to propofol injection

Protocol summary

Summary

The aim of this study was to compare pretreatment with ephedrine and lidocaine on intensity of pain on injection of propofol and hemodynamic changes. This study was done as a randomized double blind clinical trial in 2009 in Shahid Rajaee hospital. 99 patients, ASA physical status I and II, were randomly assigned into three groups to receive intravenous (IV) lidocaine 40mg, ephedrine 30µg/kg or 2ml saline. After one minute, propofol, 2mg/kg, was injected into a dorsal hand vein. Pain, assessed through face pain scale (FPS), arterial blood pressure, and heart rate were recorded before induction, just before intubation, and one minute after intubation.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138812053423N1**
Registration date: **2010-06-12, 1389/03/22**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2010-06-12, 1389/03/22

Registrant information

Name

Hamideh Yari

Name of organization / entity

Qazvin University of Medical Sciences & Health Services

Country

Iran (Islamic Republic of)

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+98 28 1368 5495

Email address

hyari@qums.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Qazvin University of Medical Sciences

Expected recruitment start date

2009-04-21, 1388/02/01

Expected recruitment end date

2009-07-23, 1388/05/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Determination of the low dose ephedrine and lidocaine effect on pain and hemodynamic changes due to propofol injection

Public title

Comparison of ephedrine and lidocaine effects on pain and blood pressure changes due to propofol injection

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: undergone elective surgery, absence of heart disease, cardiovascular, and neurological and allergic disease, age 20-50. Exclusion criteria: receiving tranquilizer, opiate or analgesic during 24 hours prior to the intervention, difficulty in communicating with patients, wheal after induction despite no history of allergies, multiple intubation attempts

Age

From **20 years** old to **50 years** old

Gender

Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **99**
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
Qazvin University of Medical Sciences & Health Services
Street address
Shahid Bahonar Blvd. Qazvin
City
Qazvin
Postal code
Approval date
empty
Ethics committee reference number
28/20/2766

Health conditions studied

1

Description of health condition studied
the advantage effects of efedrine on reducing Side effects of propofol
ICD-10 code
ICD-10 code description

Primary outcomes

1

Description
pain
Timepoint
one Minute before Intervention,one and three after Intervention
Method of measurement
face pain scale

2

Description
blood pressure chnges
Timepoint
one Minute before Intervention,one and three after Intervention
Method of measurement
blood pressure on the scale mmHg

3

Description
Heart rate
Timepoint
one Minute before Intervention, one and three after the intervention
Method of measurement
Measured by pulse oximetry device on the scale beat per minute

Secondary outcomes

empty

Intervention groups

1

Description
Injection of saline (0/9%) 2 cc , intravenous (dorsal hand vein) one minute before induction with propofol
Category
Prevention

2

Description
Injection of lidocaine (2%)2 cc , intravenous (dorsal hand vein) one minute before induction with propofol
Category
Prevention

3

Description
Injection of efedrine, 30 microgram per kilogram, intravenous (dorsal hand vein) one minute before induction with propofol
Category
Prevention

Recruitment centers

1

Recruitment center
Name of recruitment center
Shahid Rajaee hospital, Qazvin
Full name of responsible person
Dr. Hamideh Yari
Street address
Padegan st., Qazvin

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. Saeed Asefzadeh
Street address
Shahid Bahonar Blvd. Qazvin
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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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Resident of anesthesia
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Person responsible for updating data

Contact

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