

Clinical Trial Protocol

Iranian Registry of Clinical Trials

08 Jun 2026

Effect of Lidocaine volume and concentration on preventing incidence and severity of propofol injection pain

Protocol summary

Summary

Pretreatment with lidocaine can reduce propofol injection pain. The aim of the present study was to assess and compare the efficiency of lidocaine 0.4% and 2% in reducing the incidence and severity of propofol injection pain. The inclusion criteria were 4-8-years-old children, ASA class I and II, and candidates for elective surgery. The exclusion criteria were contraindication to use propofol or lidocaine, patients with thrombophlebitis, and analgesics administration 24 hours prior to the operation. This was a prospective clinical trial on children 4-8 years old candidates for elective surgery in Dr Sheikh Hospital. 100 children's were in this study, they were injected with lidocaine solutions 2% and 4% before propofol injection. Immediately after propofol injection, patient's pain evaluation based on VSD (verbal descriptor scale) and NRS (Numeric Rating Scale) using patient's verbal reaction and behavior namely fretting.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201111208143N1**
Registration date: **2013-10-26, 1392/08/04**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2013-10-26, 1392/08/04

Registrant information

Name

Ehsanolah Ghorbanian

Name of organization / entity

Department of Anesthesiology, Faculty of Medicine,
Mashhad University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 51 1801 2612

Email address

ghorbaniane891@mums.ac.ir

Recruitment status

Recruitment complete

Funding source

Researchers and Vice Chancellor for Mashhad University of Medical Sciences

Expected recruitment start date

2012-10-13, 1391/07/22

Expected recruitment end date

2013-04-11, 1392/01/22

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of Lidocaine volume and concentration on preventing incidence and severity of propofol injection pain

Public title

Effect of Lidocaine on preventing propofol injection pain

Purpose

Treatment

Inclusion/Exclusion criteria

inclusion criteria : 4-8-years-old children candidates for elective surgery; American Society of Anesthesia class I and II exclusion criteria : contraindication to use propofol or lidocaine; patients with thrombophlebitis; analgesics administration 24 hours prior to the operation.

Age

From **4 years** old to **8 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **100**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Mashhad University of Medical Sciences

Street address

zakaria bulding, between al shahidi and shahid javan square , fakouri aven.zip code9177899191

City

Mashhad

Postal code

9177899191

Approval date

2012-10-13, 1391/07/22

Ethics committee reference number

910155

Health conditions studied

1

Description of health condition studied

injection pain

ICD-10 code

R52.9

ICD-10 code description

Pain, unspecified

Primary outcomes

1

Description

pain

Timepoint

Immediately

Method of measurement

VSD (verbal descriptor scale) and NRS (Numeric Rating Scale)

Secondary outcomes

empty

Intervention groups

1

Description

Increasing the volume and decreasing drug fixed-dose lidocaine

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Dr sheikh hospital

Full name of responsible person

Dr Alireza Sabzevari

Street address

City

Mashhad

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Mashhad Uneversity of Medical Sciences

Full name of responsible person

Dr Alireza Sabzevari

Street address

Department of Anesthesiology ,Emam Reza Hospital

City

Mashhad

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Mashhad Uneversity 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

Mashhad University of Medical Sciences

Full name of responsible person

Dr Alireza Sabzevari

Position

Anesthetist and Pediatric Anesthesia Fellowship

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

Emem Reza Hospital

City

Mashhad

Postal code**Phone**

+98 80 22712

Fax**Email**

sabzevaria@mums.ac.ir

Web page address**Email**

sabzevaria@mums.ac.ir

Web page address

Person responsible for updating data

Contact

Name of organization / entity

Department of Anesthesiology , Mashhad University of Medical Sciences

Full name of responsible person

Dr Ehsanolah Ghorbanian

Position

Resident of Anesthesiology

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

Mashhad

Postal code**Phone**

00

Fax**Email**

ghorbaniane891@mums.ac.ir

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity

Department of Anesthesiology

Full name of responsible person

Dr Alireza Sabzevari

Position

Anesthetist and Pediatric Anesthesia Fellowship

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

Emem Reza Hospital

City

Mashhad

Postal code**Phone**

+98 80 22712

Fax

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