Clinical Trial Protocol
Iranian Registry of Clinical Trials

04 Jul 2026

The effect of preoperative dextrose infusion on postoperative nausea and vomiting

Protocol summary

Summary

Postoperative nausea and vomiting (PONV) remains one of the most common postoperative complications. The aim of the present study is to determine the Efficacy of preoperative dextrose infusion on postoperative nausea and vomiting. In this clinical trial 300 ASA physical status I non-diabetic patients and aged 18-40 years, scheduled for open surgeries are randomly assigned to infusion of 10 ml/kg/h Ringer's solution with 100 mL/h dextrose 10% in study group (n = 150) or Ringer's solution alone in placebo group (n = 150) during surgery. After establishment of monitoring of the operating room, all patients will be placed under general anesthesia with the same anesthetic technique, including midazolam 0.01 mg / kg, fentanyl 2µg / kg for Pre-medication, Propofol 2-2.5 mg / kg, cisatracurium 0.15 mg / kg for induction of anesthesia and isoflurane 1-1.5 MAC, morphine 0.1 mg / kg and cisatracurium during maintenance of anesthesia. PONV scores using by Visual Analogue Scale (VAS) and (Nausea and vomiting in slight level is zero to 3, in average level is 3 to 7 and in severe level is more than 7) scoring in recovery room and at 0, 30, 60, 120 minute and 4 hours postoperative are recorded.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015032721544N1**
Registration date: **2015-06-21, 1394/03/31**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2015-06-21, 1394/03/31

Registrant information

Name

Saeed Khazaei Jalil

Name of organization / entity

Shahroud University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 23 3239 6269

Email address

khazaei@shmu.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Shahroud University of Medical Sciences

Expected recruitment start date

2015-06-21, 1394/03/31

Expected recruitment end date

2015-11-21, 1394/08/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of preoperative dextrose infusion on postoperative nausea and vomiting

Public title

The effect of dextrose infusion on postoperative nausea and vomiting

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: ASA class 1; both sexes; aged 18 to 40 years; Open surgeries that are identical in terms of time and type of anesthesia. Exclusion criteria: diabetics; history of systemic disease (cardiovascular, respiratory,

renal ,...); history of nausea and vomiting.

Age
From **18 years** old to **40 years** old

Gender
Both

Phase
3

Groups that have been masked
No information

Sample size
Target sample size: **298**

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, Vice chancellor for research, Shahroud University of Medical Sciences

Street address
Ethics committee, Vice chancellor for research, Shahroud University of Medical Sciences, 7th of Tir square, Shahroud, Iran. Postal code: 3614773955

City
Shahroud

Postal code
3613773955

Approval date
2015-05-13, 1394/02/23

Ethics committee reference number
IR.SHMU.REC.1394.17

Health conditions studied

1

Description of health condition studied
Postoperative Nausea and Vomiting

ICD-10 code
Y84

ICD-10 code description
Other medical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Primary outcomes

1

Description
Intensity of Postoperative Nausea and Vomiting

Timepoint
0 (while the patient is awake), 30, 60, 120 minute and 4 hours after the surgery.

Method of measurement
Questionnaire- Visual Analog Scale

Secondary outcomes

1

Description
Total dose antiemetic drug

Timepoint
Recovery within 24 hours after surgery

Method of measurement
Questionnaire

Intervention groups

1

Description
In the study group (n=150) is infused 10 ml/kg/h Ringer’s solution with 100 mL/h dextrose 10% during surgery.

Category
Prevention

2

Description
In the placebo group (n=150) is infused of 10 ml/kg/h Ringer’s solution alone in placebo during surgery.

Category
Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center
Operation room, Imam Hossein hospital

Full name of responsible person
Javad Nourian MD

Street address
Imam Hossein Hospital, operation room, End of Towhidi avenue

City
Shahroud

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Vice chancellor for research, Shahroud University of Medical Sciences
Full name of responsible person
Mohammad Hassan Emamian MD
Street address
Shahroud University of Medical Sciences, 7th of Tir square
City
Shahroud
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, Shahroud 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
Imam Hossein Hospital, Shahroud University of Medical Sciences, Shahroud, Iran
Full name of responsible person
Javad Nourian MD
Position
Assistant professor of anesthesiology, department of anesthesia and intensive care
Other areas of specialty/work
Street address
Imam Hossein Hospital, operation room, End of Towhidi avenue
City
Shahroud
Postal code
3616911151
Phone
+98 27 3334 2001
Fax
+98 27 3333 3902
Email
javadnourian@shmu.ac.ir
Web page address
http://eh.shmu.ac.ir

Person responsible for scientific inquiries

Contact
Name of organization / entity
Imam Hossein Hospital, Shahroud University of Medical Sciences, Shahroud, Iran
Full name of responsible person
Javad Nourian MD
Position
Assistant professor of anesthesiology, department of anesthesia and intensive care
Other areas of specialty/work
Street address
Imam Hossein Hospital, operation room, End of Ayatollah Towhidi avenue
City
Shahroud
Postal code
3616911151
Phone
+98 27 3334 2001
Fax
+98 27 3333 3902
Email
javadnourian@shmu.ac.ir
Web page address
http://eh.shmu.ac.ir

Person responsible for updating data

Contact
Name of organization / entity
Shahroud University of Medical Sciences
Full name of responsible person
Saeed Khazaei Jalil
Position
Operating Room student
Other areas of specialty/work
Street address
Shahroud University of Medical Sciences, 7th of Tir square
City
Shahroud
Postal code
3613773955
Phone
+98 23 3239 6269
Fax
Email
Khazaei@shmu.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