

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

16 Sep 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,  
Shahrood University of Medical Sciences

##### Street address

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

##### City

Shahrood

##### 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

Shahrood

## 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**

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**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**

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**Position**

Assistant professor of anesthesiology, department of anesthesia and intensive care

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**Person responsible for updating data****Contact****Name of organization / entity**

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**Full name of responsible person**

Saeed Khazaei Jalil

**Position**

Operating Room student

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**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*