

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jul 2026

Evaluation of the Effect of Mg Sulfate in Post Operative Analgesia after Open Heart Surgery in coronary Ischemic Heart Disease

Protocol summary

Summary

Aim of this study was to evaluate the effect of Mg Sulfate in post operative analgesia after open heart surgery. Patients undergoing open heart surgery and have coronary disease or valve deformity for the first time. These patients disconnected from evaluation: those who have atrioventricular block or neurologic abnormalities, severe obesity, pregnancy and organ abnormalities for example in kidney and liver, ... The research contains 44 patients undergoing open heart surgery. We divided them into 2 groups (22 patients) in the first group which we infused magnesium sulfate and in the second group we infused normal saline. Induction of anesthesia with midazolam 0.1 mg/kg and sufentanyl 1 microgram/kg and propofol 1.5 mg/kg. In the preoperative phase monitoring made were 5 lead ECG, mean arterial pressure, central vein pressure, core temperature, oxygen blood saturation and CO₂ end tidal volume. Evaluating the pain score (graphic VAS). In each two groups of evaluation after 30 minutes we evaluated these parameters: pain score, difficult extubation, period of time staying in intensive care unit and nausea and vomiting.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201202159019N1**
Registration date: **2012-06-06, 1391/03/17**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2012-06-06, 1391/03/17

Registrant information

Name

Ehsan Baghbani Jam

Name of organization / entity

Hamadan University of medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 9808118250851

Email address

e.baghbani@umsha.ac.ir

Recruitment status

Recruitment complete

Funding source

Hamadan University of Medical Sciences

Expected recruitment start date

2012-03-20, 1391/01/01

Expected recruitment end date

2013-03-21, 1392/01/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation of the Effect of Mg Sulfate in Post Operative Analgesia after Open Heart Surgery in coronary Ischemic Heart Disease

Public title

Effect of Magnesium Sulfate in Heart Open Surgery

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: Patients undergoing open heart surgery; those who have coronary artery disease or valve deformity for the first time. Exclusion criteria: These patients disconnected from evaluation: those who have atrioventricular block; neurologic abnormalities; severe obesity; pregnancy; organ abnormalities for example in

kidney and liver, ...

Age

From **18 years** old to **80 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **44**

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

Hamadan university of medical sciences

Street address

shahid fahmideh st, ministry of research

City

Hamadan

Postal code

Approval date

2012-01-21, 1390/11/01

Ethics committee reference number

2752/16/35/د/پ

Health conditions studied

1

Description of health condition studied

Ischemic Heart Disease

ICD-10 code

I20-I25

ICD-10 code description

Ischaemic heart diseases

Primary outcomes

1

Description

Pain

Timepoint

after infusion of Mg after half hour

Method of measurement

graphic VAS system

Secondary outcomes

1

Description

nausa and vomiting

Timepoint

after infusion Mg after half hour

Method of measurement

inspection and clinical evaluation

Intervention groups

1

Description

Control group : Normal saline 150 ml intravenous line per 30 minutes

Category

Prevention

2

Description

Case group : Infusion of Magnesium sulfate 50 mg/kg in intravenous line per 30 minutes

Category

Prevention

Recruitment centers

1

Recruitment center

Name of recruitment center

Ekbatan Hospital

Full name of responsible person

Ehsan Baghbani Jam

Street address

City

Hamadan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Hamadan University of Medical Sciences

Full name of responsible person

Heidar Tavilani

Street address

Minsitry of Research

City

Hamadan

Grant name

Grant code / Reference number
Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Hamadan 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

Hamadan University of Medical Sciences

Full name of responsible person

Ehsan Baghbani Jam

Position

Resident of Anesthesiology

Other areas of specialty/work

Street address

Ekbatan Hospital, Operative Room Ward

City

Hamadan

Postal code

Phone

+98 81 1825 1245

Fax

Email

e.baghbanijam@umsha.ac.ir

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity

Hamadan University of Medical Sciences

Full name of responsible person

Maryam Davoudi

Position

Associate of Anesthesiology

Other areas of specialty/work

Street address

Ekbatan Hospital, Operative Room Ward

City

Hamadan

Postal code

Phone

+98 81 1825 1245

Fax

Email

mdavoudi10@yahoo.com

Web page address

Person responsible for updating data

Contact

Name of organization / entity

Hamadan University of Medical Sciences

Full name of responsible person

Ehsan Baghbani Jam

Position

Resident of Anesthesiology

Other areas of specialty/work

Street address

Ekbatan Hospital, Operative Room Ward

City

Hamadan

Postal code

Phone

+98 81 1825 1245

Fax

Email

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