Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

Effect of Desmopressin on bleeding in coronary artery bypass graft surgery patients undergoing cardiopulmonary bypass pump with antiplatelet drugs

Protocol summary

Summary

The purpose of this study was to evaluat the effect of Desmopressin on bleeding in coronary artery bypass graft (CABG) surgery patients undergoing cardiopulmonary bypass pump who have received antiplatelet drugs 100 patients who are candidate for CABG enter to the study and divide into two groups.For all patients, hemoglobin, platelet count, PT, INR, PTT, BTand CT will be measured. A dose of Desmopressin is given as two drops to the first group before surgery. For the second group the same amount of normal saline is given as placebo. All patients routinely underwent coronary artery bypass graft surgery under general. After surgery, patients were transferred to ICU. Second dose of Desmopressin as two drops 6 hours after the first dose is given to the first group and the same amount of normal saline is given to second group as placebo. One hour after second dose Hemoglobin, platelet count, PT, INR, PTT and BT are checked again. Side effects include nausea and vomiting, hypotension, postoperative blood loss, need for blood transfusions and platelet transfusions during the first 24 hours were recorded.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201409304345N3**
Registration date: **2014-12-02, 1393/09/11**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2014-12-02, 1393/09/11

Registrant information

Name

Ali Mirmansouri

Name of organization / entity

Guilan University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 13 1666 9064

Email address

a_mirmansoori@gums.ac.ir

Recruitment status

Recruitment complete

Funding source

Guilan University of Medical Sciences

Expected recruitment start date

2014-11-22, 1393/09/01

Expected recruitment end date

2015-03-10, 1393/12/19

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of Desmopressin on bleeding in coronary artery bypass graft surgery patients undergoing cardiopulmonary bypass pump with antiplatelet drugs

Public title

Effect of Desmopressin on bleeding after coronary artery bypass graft

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: Candidate for CABG; antiplatelet drugs
Exclusion criteria: Need to get an postoperative

anticoagulation

Age

From **30 years** old

Gender

Both

Phase

2-3

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

Used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Guilan university of Medical Sciences

Street address

Namjoo street

City

Rasht

Postal code

4193893345

Approval date

2014-08-26, 1393/06/04

Ethics committee reference number

1930252810

Health conditions studied

1

Description of health condition studied

Complications of Coronary artery bypass grafting

ICD-10 code

T82.2

ICD-10 code description

Mechanical complication of coronary artery bypass and valve grafts

Primary outcomes

1

Description

Blood transfusion

Timepoint

During 24 hours after surgery

Method of measurement

Hemoglobin less than 9 by Sysmex K1000

2

Description

Platelet transfusions

Timepoint

During the first 24 hours after surgery

Method of measurement

Based on the platelet less than 100000

Secondary outcomes

empty

Intervention groups

1

Description

Intervention 1: Giving 10-40 microgram desmopressin as two drops before CABG and repeat it 6 hours later, after surgery, in ICU

Category

Treatment - Drugs

2

Description

Intervention 2: Giving 10-40 microgram normal saline as two drops before CABG and repeat it 6 hours later, after surgery, in ICU

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Dr. Heshmat Hospital

Full name of responsible person

Ali Mirmansouri

Street address

Heshmat Street

City

Rasht

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research of Guilan University of Medical Sciences

Full name of responsible person

Abtin Heidarzadeh

Street address

Shahid beheshti Highway

City

Rasht

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 of Guilan 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

Guilan University of Medical Sciences

Full name of responsible person

Ali Mirmansouri

Position

Anesthesiologist; Associate Professor

Other areas of specialty/work

Street address

Poursina Hospital

City

Rasht

Postal code

4193713194

Phone

+98 13 3331 0434

Fax

+98 13 3334 5132

Email

arcguilan1392@gmai.com

Web page address

www.arc.gums.ac.ir

Person responsible for scientific inquiries

Contact

Name of organization / entity

Guilan University of Medical Sciences

Full name of responsible person

Ali Mirmansouri

Position

Anesthesiologist; Assosiate proffessor

Other areas of specialty/work

Street address

Poursina Hospital

City

Rasht

Postal code

4139638459

Phone

+98 13 3331 0434

Fax

+98 13 3334 5132

Email

arcguilan1392@gmail.com

Web page address

www.arc.gums.ac.ir

Person responsible for updating data

Contact

Name of organization / entity

Guilan University of Medical Sciences

Full name of responsible person

Hedieh Nemati

Position

Medical laboratory Sciences Technician; Bachelor's Degree

Other areas of specialty/work

Street address

Poursina Hospital

City

Rasht

Postal code

4193713194

Phone

+98 13 3331 0434

Fax

+98 13 3334 5132

Email

nematihedieh@gmail.com

Web page address

www.arc.gums.ac.ir

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