Clinical Trial Protocol
Iranian Registry of Clinical Trials

18 Sep 2026

Impact of Proton Pump Inhibitors (pantoprazol) on Arrhythmia and Hypomagnesaemia Following off pump CABG

Protocol summary

Summary

Serum magnesium levels have changed following CABG so that Statistics hypomagnesaemia after CPB is 70 percent. Recently, the potential relationships between chronic administration of PPI and hypomagnesaemia have been reported. In this study believe that PPI effect on blood magnesium levels and its relationship with ventricular arrhythmia and AF in patients undergoing CABG- Off surgery were assessed. For stress ulcer prophylaxi, patients randomly assigned to a group of pantoprazole 40 mg twice a day intravenously when they are stay in the ICU and NPO. And 40 mg once a day orally during hospitalization in ICU (PO patient) and cardiac surgery (POST-ICU). and administered to the other half (the control group) Ranitidine 50 mg three times a day intravenously on days of hospitalization in ICU and NPO and famotidine 40 mg tablet once a day orally during hospitalization in ICU (PO patient), and cardiac surgery (POST-ICU). Hypomagnesaemia frequency will be compared between two groups.

General information

Acronym

Proton Pump Inhibitors (pantoprazol)

IRCT registration information

IRCT registration number: **IRCT201511088384N5**
Registration date: **2016-07-17, 1395/04/27**
Registration timing: **prospective**

Last update:
Update count: **0**

Registration date

2016-07-17, 1395/04/27

Registrant information

Name

Arash Peivandi Yazdi

Name of organization / entity

Mashhad University of Medical Sciences

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Mashhad university of medical sciences

Expected recruitment start date

2016-08-31, 1395/06/10

Expected recruitment end date

2016-12-21, 1395/10/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Impact of Proton Pump Inhibitors (pantoprazol) on Arrhythmia and Hypomagnesaemia Following off pump CABG

Public title

Effect of Proton Pump Inhibitors (pantoprazol) on Hypomagnesaemia

Purpose

Treatment

Inclusion/Exclusion criteria

وارد مطالعه خواهند off-pump به روش CABG بيماران كانديد جراحي شد. معيارهاي خروج از مطالعه شامل اين موارد مي باشد: عدم رضايت بيمار؛ بيماران تحت اعمال جراحي قلبي غير كرونري؛ بيماراني قرار ميگيرند؛ on-pump به روش CABG كه به هر دليلي تحت جراحي سابقه بيماري شناخته شده كليه شامل ناهنجاري هاي ساختماني؛

بيماري كه دچار ايستsingle kidney نارسايي كليه و يا بيماران ؛ اورژانس؛ بيماران CABGطولاني شده است؛ موارد CPR قلبي شده و مبتلا به سوء تغذيه شديد؛ سابقه حساسيت به داروهاي مورد استفاده و يا بروز علائم افزايش حساسيت يا مسموميت با دارو؛ بيماران مبتلا به ؛ وجود هرگونه آريتمي قلبی قبل عمل؛EF< 35% نارسايي قلبي با قلبي؛ داشتن اختلال CABG سابقه مصرف داروهاي ضد آريتمي؛ سابقه الكتروليتي (هيپو يا هيپر كالمي/ كلسمي) قبل از شروع مطالعه؛ كوتاه، QT ،طولانی QT بيماران با ريسك فاكتور آريتمي مانند سندرم بروگادا و غيره؛ بيماران با سابقه ناراحتی معده و تحت درمان با بلوكر H2 پنتوپرازول و.

Age
From **6 years** old

Gender
Both

Phase
2-3

Groups that have been masked
No information

Sample size
Target sample size: **380**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Single blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Mashhad Research deputy of university of Medical Sciences

Street address
Mashhad university of medical sciences

City
Mashhad

Postal code

Approval date
2015-08-01, 1394/05/10

Ethics committee reference number
IR.MUMS.fm.REC.1394.292

Health conditions studied

1

Description of health condition studied
Atherosclerotic heart disease

ICD-10 code
I25.1

ICD-10 code description
Coronary (artery): atheroma atherosclerosis disease sclerosis

Primary outcomes

1

Description
Hypomagnesaemia

Timepoint
Before/ after surgery

Method of measurement
serum

Secondary outcomes

1

Description
Arrhythmia

Timepoint
After surgery

Method of measurement
ECG

Intervention groups

1

Description
Ranitidine 50 mg three times a day intravenously on days of hospitalization in ICU and NPO and famotidine 40 mg tablet once a day orally during hospitalization in ICU (PO patient), and cardiac surgery (POST-ICU).

Category
Treatment - Drugs

2

Description
Pantoprazole 40 mg twice a day intravenously when they are stay in the ICU and NPO. And 40 mg once a day orally during hospitalization in ICU (PO patient) and cardiac surgery (POST-ICU).

Category
Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center
Emam Reza hospital

Full name of responsible person
Dr Arash Peivandi and Dr Shahram Amini

Street address
Emam Reza Hospital, Emam Reza Square, Ebne Sina Avenue, Mashhad - Iran

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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Mashhad university of medical sciences
Full name of responsible person
Dr. Arash Peivandi Yazdi
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University St., Ghoraishy Building, Mashhad - Iran
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Mashhad
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Mashhad 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
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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