Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Effect of preparation trough non-regional induced ischemia in the prevention of contrast medium nephropathy in patients undergoing coronary angiography or angioplasty

Protocol summary

Summary

Objective: Effect of preparation trough non-regional induced ischemia in the prevention of contrast medium nephropathy in patients undergoing coronary angiography or angioplasty. Design: Interventional, Non-blinded, Randomized Sample size: 51 People. Inclusion criteria: The patients undergoing angiography or angioplasty due to elevated acute coronary syndrome (Non-ST Elevation Myocardial Infarction); Patients who have risk score more than 6, based on Mehran studies. Exclusion criteria: Patients undergoing ST Elevation Myocardial Infarction; Patients undergoing cardiogenic shock; Patients with severe heart failure (NYHA class 3 or 4, or left ventricular ejection fraction less than 30%) that do not tolerate mentioned protocol of treatment fluid; Kidney transplant patients or patients undergoing dialysis; Patients who receive contrast coroner substance a week before angiography or angioplasty; Patients who can not stand cuff inflation for 5 minutes. Intervention group: Angiogram or angioplasty patients after angiography or angioplasty receive induction of ischemic limbs in 4 times. Control group: Patients who receive Normal Saline in 1.5 CC for a kilogram in an hour, during 3 to 12 hours before and 6 to 24 hours after angiography or angioplasty. Primary outcome measure: Failure caused by Contrast medium, 24 to 48 hours after angiography or angioplasty is checked via blood test.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015061422713N1**
Registration date: **2015-06-30, 1394/04/09**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2015-06-30, 1394/04/09

Registrant information

Name
Masoud Sajadi
Name of organization / entity
Imam Reza Hospital
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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research of Mashhad University of Medical Sciences

Expected recruitment start date

2013-04-21, 1392/02/01

Expected recruitment end date

2014-08-23, 1393/06/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of preparation trough non-regional induced ischemia in the prevention of contrast medium nephropathy in patients undergoing coronary angiography or angioplasty

Public title

Prevention of contrast nephropathy in patients undergoing coronary angiography or angioplasty

Purpose
Treatment

Inclusion/Exclusion criteria
Inclusion criteria: The patients undergoing angiography or angioplasty due to elevated acute coronary syndrome (Non-ST Elevation Myocardial Infarction); Patients who have risk score more than 6, based on Mehran studies. Exclusion criteria: Patients undergoing ST Elevation Myocardial Infarction; Patients undergoing cardiogenic shock; Patients with severe heart failure (NYHA class 3 or 4, or left ventricular ejection fraction less than 30%) that do not tolerate mentioned protocol of treatment fluid; Kidney transplant patients or patients undergoing dialysis; Patients who receive contrast cronary substance a week before angiography or angioplasty; Patients who can not stand cuff inflation for 5 minutes; Patients with bleeding disorders so that they suffered at least 1 gram per deciliter Hb falling.

Age
No age limit

Gender
Both

Phase
2

Groups that have been masked
No information

Sample size
Target sample size: **51**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Vice Chancellor for Research, Mashhad University of Medical Sciences

Street address
Vice Chancellor for Research, Mashhad University of Medical Sciences, Ghoreishi Building, Daneshgah St, Mashhad

City
Mashhad

Postal code

Approval date
2013-07-23, 1392/05/01

Ethics committee reference number
920581

Health conditions studied

1

Description of health condition studied
Contrast medium Nephropathy

ICD-10 code
N14.2

ICD-10 code description
Nephropathy induced by unspecified drug, medicament or biological substance

Primary outcomes

1

Description
Failure caused by Contrast medium (CIN)

Timepoint
24 to 48 hours after angiography or angioplasty

Method of measurement
Blood test

2

Description
Blood creatinine level

Timepoint
24 to 48 hours after angiography or angioplasty

Method of measurement
Blood test

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Angiogram or angioplasty patients who after angiography or angioplasty in 4 times receive induction of ischemic limbs after angiography or angioplasty in 4 times.

Category
Prevention

2

Description
Control group: Patients who received Normal Saline in 1.5 CC for a kilogram in an hour, during 3 to 12 hours before and 6 to 24 hours after angiography or angioplasty.

Category
Prevention

Recruitment centers

1

Recruitment center
Name of recruitment center
Imam Reza Hospital
Full name of responsible person
Masoud Sajadi
Street address
Imam Reza Hospital, Imam Reza Square, Mashhad
City
Mashhad

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Mashhad University of Medical Sciences
Full name of responsible person
Mohsen Tafaghodi
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Vice Chancellor for Research, Mashhad University of Medical Sciences, Ghoreishi Building, Daneshgah St, Mashhad
City
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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
Name of organization / entity
Imam Reza Hospital
Full name of responsible person
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Person responsible for updating data

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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