

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 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

Country

Iran (Islamic Republic of)

Phone

+98 51 3840 0000

Email address

sajjadim961@mums.ac.ir

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 coronary 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

Street address

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

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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

Seyed Mesoud Sajadi

Position

Resident

Other areas of specialty/work

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Contact

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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