Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

Comparison of Effectivness of Remote Ischemic Preconditioning effects(RIPC) on Contrast Induced Nephropathy in patients undergoing Coronary Angiography and Angioplasty

Protocol summary

Study aim
Effectiveness of Remote Ischemic Preconditioning in Contrast Induced Nephropathy in high risk patients
Design
100 high risk patients for contrast induced nephropathy randomized in 2 parallel groups for RIPC
Settings and conduct
Elective stable ischemic heart disease with chronic kidney disease candidate for coronary angiography and angioplasty in Rajaie Heart ceneter undergone RIPC, with protocol of 4 time cuff inflation in 5 minute about 50 mmhg upper systolic blood pressure and deflate for 5 min and 10 mmhg upper than diastolic blood pressure in control group
Participants/Inclusion and exclusion criteria
patients within 18-80 years old Satisfaction for this study elective stable ischemic heart disease without need for urgent angiography high risk patients for CIN
Intervention groups
100 high risk patients for contrast induced nephropathy undergoing coronary angiography or angioplasty randomized in 2 groups with RIPC in on group and no intervention in control group
Main outcome variables
Contrast Induced Nephropathy

General information

Reason for update
Acronym
RIPC
IRCT registration information
IRCT registration number: **IRCT20171230038144N1**
Registration date: **2018-05-20, 1397/02/30**
Registration timing: **retrospective**

Last update: **2018-05-20, 1397/02/30**
Update count: **0**
Registration date
2018-05-20, 1397/02/30

Registrant information
Name
Hoda Raffiei jeoldar
Name of organization / entity
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Iran (Islamic Republic of)
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Recruitment status
Recruitment complete
Funding source

Expected recruitment start date
2017-12-23, 1396/10/02
Expected recruitment end date
2018-02-21, 1396/12/02
Actual recruitment start date
2017-12-23, 1396/10/02
Actual recruitment end date
2018-02-21, 1396/12/02
Trial completion date
empty

Scientific title
Comparison of Effectivness of Remote Ischemic Preconditioning effects(RIPC) on Contrast Induced Nephropathy in patients undergoing Coronary Angiography and Angioplasty

Public title
Comparison of Effectivness of Remote Ischemic Preconditioning effects(RIPC) on Contrast Induced Nephropathy in patients undergoing Coronary

Angiography and Angioplasty

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

patients with stable ischemic heart disease candidate for coronary angiography or angioplasty chronic kidney disease patients within 18-80 years old

Exclusion criteria:

patients unsatisfaction

Age

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

Gender

Both

Phase

3

Groups that have been masked

- Participant
- Data analyser

Sample size

Target sample size: **100**

Actual sample size reached: **100**

Randomization (investigator's opinion)

Randomized

Randomization description

Balanced block random with Random Allow,version:1.2 software

Blinding (investigator's opinion)

Double blinded

Blinding description

Pateints with serum creatinine more than 1.4 mg/dl or glumerolar filtration rate less than 60 divided in 2 random groups with Balanced block random with Random Allow,version:1.2 software

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Iran Unversity of Medical Scinses

Street address

Iran University of Medical Scinsce, Hemat highway , Next to Milad Tower, Tehran ,Iran

City

Tehran

Province

Tehran

Postal code

۱۴۴۹۶۱۴۵۳۵

Approval date

2017-12-23, 1396/10/02

Ethics committee reference number

IR.IUMS.FMD.REC 1396.9311171014

Health conditions studied

1

Description of health condition studied

Contrast Induced Nephropathy

ICD-10 code

N14.1

ICD-10 code description

Nephropathy induced by other drugs, medicaments and biological substances

Primary outcomes

1

Description

Creatinine level and Glomerular filtration rate and urinary output before coronaary angiography and angioplasty and in 3-5 days after procedure

Timepoint

before coronary angiography and angioplasty and in 3-5 days after procedure

Method of measurement

Increase 0.5mg/dl or 25% in serum creatinine levele

Secondary outcomes

empty

Intervention groups

1

Description

Elective stable ischemic heart disease with chronic kidney disease candidate for coronary angiography and angioplasty in Rajaie Heart cneter undergone RIPC,in intervention group we have with protocol of 4 time cuff inflation in 5 minute about 50 mmhg upper systolic blood pressure and deflate for 5 minute.

Category

Treatment - Devices

2

Description

Control group:In control placebo group10 mmhg upper than diastolic blood pressure in 4 time inflation and deflation in 5 minute and creatinine level and urinary output evaluate in 2-7 days after angiography

Category

Behavior

Recruitment centers

1

Recruitment center
Name of recruitment center
Shahid Rajaei Heart Center
Full name of responsible person
Hoda Raffiei Jelodar
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Rajaee Cardiovascular, Medical and Research Center
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Sponsors / Funding sources

1

Sponsor
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Full name of responsible person
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Web page address
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Iran University of Medical Sciences
Proportion provided by this source
100
Public or private sector
Public
Domestic or foreign origin
Domestic
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
Academic

Person responsible for general inquiries

Contact
Name of organization / entity
Iran University of Medical Sciences
Full name of responsible person
Hoda Raffiei jelodar
Position
Resident
Latest degree
Medical doctor
Other areas of specialty/work
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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is a plan to make this available

Study Protocol
Yes - There is a plan to make this available

Statistical Analysis Plan
Yes - There is a plan to make this available

Informed Consent Form
Yes - There is a plan to make this available

Clinical Study Report
Yes - There is a plan to make this available

Analytic Code
Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary
Not applicable

Title and more details about the data/document
Data and analysis file would be available in SPSS format

When the data will become available and for how long
From 1397

To whom data/document is available
Physicians

Under which criteria data/document could be used
Clinical and medical management

From where data/document is obtainable
hoda raffiei jelodar

What processes are involved for a request to access data/document
One week after received email data will send

Comments
Tell me about why they need our data