Clinical Trial Protocol
Iranian Registry of Clinical Trials

09 Jun 2026

The effect of curcumin in the prevention of contrast induced nephropathy in patients with moderate kidney failure following coronary angioplasty or angiography

Protocol summary

Summary

Contrast nephropathy is the most common cause of iatrogenic acute kidney injury. This problem particularly in CKD patients is more common. In various studies, the positive effect of antioxidants in preventing of it is suggested. Therefore, we decided to study the antioxidant effect of curcumin in the prevention of contrast nephropathy in moderate chronic kidney disease patients. All patients with stable angina and unstable or non-ST elevated MI in the of Ghaem and Imam Reza hospital who are candidates for elective and/or emergency coronary angiography or angioplasty enrolled in study, if creatinine more than 1.2 or GFR between 30 to 60 ml / min are based on prior lab tests. It is done as a double blind study for both patients and physicians. 30 patients will be randomly allocated to receive capsule Curcumin 500 mg three times daily from 2 days before angiography until 3 days after it and 30 patients in control group will receive placebo to the same extent. In both groups, from 12 hours before angiography normal saline solution infuse at a rate of 1ml/Kg/hr and it will continue to 12 hours after that. Serum creatinine will be reevaluate in second and third days after angiography. Urinary NGAL will be assessed in the next day of angiography.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138706261256N1**
Registration date: **2017-10-24, 1396/08/02**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2017-10-24, 1396/08/02

Registrant information

Name
Maryam Hami
Name of organization / entity
Health Organization
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Iran (Islamic Republic of)
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Recruitment status

Recruitment complete

Funding source

Mashhad University of Medical Sciences

Expected recruitment start date

2016-10-11, 1395/07/20

Expected recruitment end date

2017-05-01, 1396/02/11

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of curcumin in the prevention of contrast induced nephropathy in patients with moderate kidney failure following coronary angioplasty or angiography

Public title

The effect of curcumin in the prevention of kidney failure following heart angiography

Purpose

Prevention

Inclusion/Exclusion criteria
Inclusion criteria: All patients undergoing elective coronary angiography who are older than 18 years and are suffering from chronic kidney failure. Exclusion criteria: patients on dialysis, acute renal failure before angiography, cardiogenic shock, heart failure, use of medications such as N-acetyl cysteine, vitamin C, use of intravenous contrast to other causes, mannitol, diuretics, theophylline, warfarin and dopamine in the past two weeks.
Age
From **18 years** old
Gender
Both

Phase
2-3
Groups that have been masked
No information
Sample size
Target sample size: **60**
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
Mashhad University Of Medical sciences ethics Committee
Street address
Vice President of Research, Ghoreshi building, Daneshgah st.
City
Mashhad
Postal code
Approval date
2016-08-17, 1395/05/27
Ethics committee reference number
IR.MUMS.sm.REC.1395.220

Health conditions studied

1

Description of health condition studied
Acute kidney injury
ICD-10 code
N17, N18,
ICD-10 code description
Renal Failure

Primary outcomes

1

Description
serum creatinine
Timepoint
0,1,3 days- 1th day
Method of measurement
mg/dl

2

Description
urinary NGAL
Timepoint
First day
Method of measurement
ng/ml

Secondary outcomes

1

Description
nausea
Timepoint
daily
Method of measurement
history &physical exam

2

Description
diarrhea
Timepoint
daily
Method of measurement
history &physical exam

Intervention groups

1

Description
Control group receive placebo capsule 500 mg three times daily from 2 days before angiography until 3 days after it.
Category
Treatment - Drugs

2

Description
Intervention group receive Curcumin capsule 500 mg three times daily from 2 days before angiography until 3 days after it.

Category
Treatment - Drugs

Recruitment centers

1

Recruitment center
Name of recruitment center
Ghaem Hospital
Full name of responsible person
Street address
City
Mashhad

2

Recruitment center
Name of recruitment center
Emam Reza Hospital
Full name of responsible person
Street address
City
Mashhad

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice Chancellor Of Research, Mashad University of Medical Sciences
Full name of responsible person
Mohsen Tafaghodi
Street address
Vice President of Research- Ghoreshi building- Daneshgah st.
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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
Vice Chancellor Of Research, Mashad 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
Vice Chancellor Of Research, Mashad University of Medical Sciences
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Person responsible for scientific inquiries

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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