

# 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

###### Country

Iran (Islamic Republic of)

###### Phone

+98 51 1765 9556

###### Email address

hamim@mums.ac.ir

##### 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.**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**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  
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**Position**

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**Full name of responsible person**

Amir Bigdeli

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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*