Clinical Trial Protocol
Iranian Registry of Clinical Trials

28 May 2026

The effect of Allopurinol in prevention of contrast induced nephropathy in patients undergoing angioplasty

Protocol summary

Study aim

Determination of the effect of Allopurinol in preventing contrast-induced nephropathy based on GFR
Determination of the effect of Allopurinol in preventing contrast-induced nephropathy based on hyperuricemia

Design

This clinical trial is randomized, double-blinded and with control group.Randomization will be done using the Randlist software.The case group is given allopurinol at a dose of 300 mg before angiography and then 300 mg one hour before angiography is given to the patient. The control group will also use the placebo.

Settings and conduct

This study was carried out at the Shahid Madani Hospital in Tabriz and patients will receive a blood sample within 3 days after angioplasty. A urine sample will also be taken from patients for analysis and evaluation of proteinuria.Also, the patients and the practitioner who perform the treatment will be unaware of the type of treatment being prescribed.All angioplasty will be performed by an experienced cardiologist. The VISPIAQUE injection of 320mgl / ml, 100ml GE HEALTHCARE (Norway), and the volume of the contrast agent based on urea and creatinine and GFR of the patients will be adjusted to a maximum of 100cc to be used.

Participants/Inclusion and exclusion criteria

Inclusion criteria: age above 50, first anisoplasty, elective angioplasty, high creatinine dl / mg 1.1 Exclusion criteria: emergency angioplasty, diabetes, history of acute rheumatic fever, chronic renal failure, and history of kidney disease

Intervention groups

Allopurinol was used in the case group and placebo was used in the control group

Main outcome variables

The GFR and the Mehran Contrast Nephropathy Risk Score are calculated. The amount of creatinine, uric acid, calcium, magnesium, and albumin is measured.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20190406043182N1**
Registration date: **2019-10-05, 1398/07/13**
Registration timing: **retrospective**

Last update: **2019-10-05, 1398/07/13**
Update count: **0**

Registration date

2019-10-05, 1398/07/13

Registrant information

Name

haleh bodagh

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 41 3389 3710

Email address

haleh.bodagh@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-04-17, 1398/01/28

Expected recruitment end date

2019-04-24, 1398/02/04

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of Allopurinol in prevention of contrast induced nephropathy in patients undergoing angioplasty

Public title
The effect of Allopurinol in prevention of contrast induced nephropathy in patients undergoing angioplasty
Purpose
Prevention
Inclusion/Exclusion criteria
Inclusion criteria:
inclusion criteria: 1. Age> 55,2. The first turn of angioplasty3. Elective angioplasty4. Creatinine> 1 mg / kg5. Normal GFR Out put
Exclusion criteria:
Exclusion criteria:1. Emergency Angioplasty,2. Diabetes3. History of the ARF4. Chronic renal failure5. Family history of kidney disease
Age
From **55 years** old
Gender
Both

Phase
3
Groups that have been masked

- Participant
- Care provider
- Outcome assessor
- Data and Safety Monitoring Board

Sample size
Target sample size: **100**
Randomization (investigator's opinion)
Randomized
Randomization description
Finally, 100 patients were randomly assigned to either a 50-dose or a placebo group using the Randomization Block method. Randomization is done using Excel software. Allocation concealment is fully respected.
Blinding (investigator's opinion)
Double blinded
Blinding description
When patients fill out a clinical trial consent they may receive the drug or placebo at random. Neither the patient nor the nurses are aware of the contents of the envelopes. The nurse gives these drugs to patients in pre-packages. These envelopes contain six tablets of 100 mg Allopurinol or six tablets of similar appearance (sugar and gypsum). The statistics specialist will eventually provide the relevant information to the researcher who analyzes the data.
Placebo
Used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics Committee of Tabriz University of Medical Sciences
Street address
Golgshest St.-Tabriz University of Medical Sciences
City
tabriz
Province
East Azarbaijan
Postal code
5165665931
Approval date
2019-02-28, 1397/12/09
Ethics committee reference number
IR.TBZMED.REC.1397.959

Health conditions studied

1

Description of health condition studied
Nephropathy
ICD-10 code
28.9
ICD-10 code description
Disorder of kidney and ureter, unspecified

Primary outcomes

1

Description
GFR
Timepoint
before-after
Method of measurement
Urinary albumin level was measured by an electroanalytical analyzer, which was measured automatically by spectrophotometric method.

Secondary outcomes

empty

Intervention groups

1

Description
Use of Allopurinol
Category
Treatment - Drugs

2

Description
Use of Placebo

Category
Placebo

Recruitment centers

1

Recruitment center
Name of recruitment center
Shahid Madani Hospital in Tabriz
Full name of responsible person
Nase Aslalnaabadi/Haleh Bodagh
Street address
Aazadi Ave-golgasht-Tabriz University of Medical Science
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Tabriz
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haleh.bodagh@gmail.com

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Tabriz University of Medical Sciences
Full name of responsible person
Naser Aslanaabadi/Haleh Bodagh
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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
Tabriz 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
Tabriz University of Medical Sciences
Full name of responsible person
Haleh Bodagh
Position
Associate
Latest degree
Specialist
Other areas of specialty/work
Cardiology
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University Street, opposite to the University of R & D Complex, Shahid Madani Hospital
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD
In order to analyze this data to extract further paper

Study Protocol
No - There is not a plan to make this available

Statistical Analysis Plan
No - There is not a plan to make this available

Informed Consent Form
No - There is not a plan to make this available

Clinical Study Report
No - There is not a plan to make this available

Analytic Code
Not applicable

Data Dictionary
Not applicable