

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

28 Jun 2026

### Effect of supplemental oxygen in prevention of contrast nephropathy in patients referring to angiography center.

#### Protocol summary

##### Summary

Patients which are undergoing elective CAG will be entered in the study. For all patients questionnaire will fill. Patients will be divided 2 groups; oxygen receiving group and non receiving oxygen group. First group will receive nasal oxygen 2-3 lit/min from 10 min before starting of the procedure up to the end of the procedure. Second group will inhale from the oxygen room. ABG will be taken from all of the patients before receiving oxygen and at the end of the procedure. All of the patients receive the same type of contrast media. Contrast media dosing will be from 100 cc up to 200cc.1cc/kg /hour isotonic saline infusion will be started for all of the patients from 12 hours before up to 12 hours after the procedure. Diuretics will hold one day before the procedure. Serum creatinin will be checked before and 48 hours after the procedure. End results will be analyzed with statistical software.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2014082618936N1**  
Registration date: **2014-10-10, 1393/07/18**  
Registration timing: **registered\_while\_recruiting**

Last update:

Update count: **0**

##### Registration date

2014-10-10, 1393/07/18

##### Registrant information

###### Name

Farzane Sadat Minoo

###### Name of organization / entity

Imam Khomeini Hospital

###### Country

Iran (Islamic Republic of)

###### Phone

+98 21 6658 1568

###### Email address

fs-minoo@sina.tums.ac.ir

###### Recruitment status

###### Recruitment complete

###### Funding source

Nefrology research center, Tehran University of Medical Sciences

###### Expected recruitment start date

2014-09-01, 1393/06/10

###### Expected recruitment end date

2014-12-01, 1393/09/10

###### Actual recruitment start date

empty

###### Actual recruitment end date

empty

###### Trial completion date

empty

###### Scientific title

Effect of supplemental oxygen in prevention of contrast nephropathy in patients referring to angiography center.

###### Public title

Effect of supplemental oxygen in prevention of contrast nephropathy

###### Purpose

Prevention

###### Inclusion/Exclusion criteria

Inclusion criteria: male or female patients older than 35 years old. Exclusion criteria: cardiogenic shock; CHF; ACS; acute MI; COPD; ESRD under dialysis; O2 SAT < %90; need for emergency CABG.

###### Age

From **35 years** old to **85 years** old

###### Gender

Both

## Phase

2-3

## Groups that have been masked

No information

## Sample size

Target sample size: 430

## Randomization (investigator's opinion)

Randomized

## Randomization description

## Blinding (investigator's opinion)

Single blinded

## Blinding description

## Placebo

Not used

## Assignment

Parallel

## Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Tehran University of Medical Sciences

##### Street address

Tehran University of Medical Sciences, Ghods street,  
Keshavarz boulevard

##### City

Tehran

##### Postal code

#### Approval date

2014-08-05, 1393/05/14

#### Ethics committee reference number

24524

## Health conditions studied

### 1

#### Description of health condition studied

Contrast nephropathy

#### ICD-10 code

N14.3

#### ICD-10 code description

Nephropathy induced by heavy metals

## Primary outcomes

### 1

#### Description

serum creatinin

#### Timepoint

48 hours later

#### Method of measurement

laboratory

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

Control group will receive normal saline 1ml/kg/h starting 12 hours before to 12 hours after contrast agent administration. Patients will receive 100-200ml contrast agent. Diuretics will be held 24 hours before contrast administration.

#### Category

Prevention

### 2

#### Description

Intervention group: these patients will receive nasal oxygen 2-3 liter/min from 10 min before procedure up to the end of the procedure in addition to normal saline 1ml/kg/h from 12 hours before to 12 hours after contrast administration. They will receive 100-200 ml contrast agent. Diuretics will be held 24 hours before contrast administration.

#### Category

Treatment - Other

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Rajaiy Heart Center

##### Full name of responsible person

Dr Salman Nikfarjam

##### Street address

Angiography ward, Rajaiy Heart Center, Vali-e-Asr  
Niyesh crossroad

##### City

Tehran

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Vice Chancellor of Research, Tehran University of  
Medical Sciences

##### Full name of responsible person

Dr Masoud Younesian

##### Street address

Tehran University of Medical Sciences, Ghods street,  
Keshavarz boulevard

##### City

Tehran

#### 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, Tehran 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**

Tehran University of Medical Sciences

**Full name of responsible person**

Elham Ramezanzade

**Position**

Nefrology fellow ship

**Other areas of specialty/work**

**Street address**

Nephrology Research Center, Imam Khomeini Hospital, Gharib St.,

**City**

Tehran

**Postal code**

00982166581568

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rz.elam58@gmail.com; dr.cardiolog58@yahoo.com

**Web page address**

**Person responsible for scientific inquiries**

**Contact**

**Name of organization / entity**

Tehran University of Medical Sciences

**Full name of responsible person**

Farzane Sadat Minoo

**Position**

Assistany professor

**Other areas of specialty/work**

**Street address**

Nenefrology research center,imam khomeini hospital,gharib sreet,Tehran

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**Web page address**

**Person responsible for updating data**

**Contact**

**Name of organization / entity**

Tehran University of Medical Sciences

**Full name of responsible person**

Farzane Sadat Minoo

**Position**

Assistant professor

**Other areas of specialty/work**

**Street address**

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**City**

Tehran

**Postal code**

**Phone**

**Fax**

**Email**

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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*