Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

Investigating the effects of dexmedetomidine infusion during surgery on renal function parameters in patients receiving kidney transplantation

Protocol summary

Summary

50 patients will be randomly assigned into treatment and placebo control group. They will receive standard care and intervention for kidney transplantation in our setting. Treatment group will receive 1 mcg/kg/hr of the dexmedetomidine infusion and the placebo group will receive the same volume of normal saline. Demographic information, clinical examination, patients's history and blood chemistry parameters will be recorded and analyzed.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2017101331487N5**
Registration date: **2017-10-24, 1396/08/02**
Registration timing: **prospective**

Last update:
Update count: **0**

Registration date

2017-10-24, 1396/08/02

Registrant information

Name

مهرداد Mesbah kiaei

Name of organization / entity

Iran University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 912 346 5866

Email address

dr.mmesbah@gmail.com

Recruitment status

Recruitment complete

Funding source

Vice-chancellor for Research, Iran University of Medical Sciences

Expected recruitment start date

2017-11-06, 1396/08/15

Expected recruitment end date

2018-03-21, 1397/01/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Investigating the effects of dexmedetomidine infusion during surgery on renal function parameters in patients receiving kidney transplantation

Public title

Drug therapy for improving the renal function after kidney transplantation

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: - end stage renal disease (ESRD) patients - candidate for renal transplant - graft from living donor - age from 18 to 70 years old Exclusion criteria: - bradycardia (HR<50) - hypotension (SBP<100) - ejection fraction below 30% (EF<30%) - transplant from cadaver - simultaneous transplantation of kidney and pancreas - having contraindication for kidney transplantation

Age

From **18 years** old to **70 years** old

Gender

Both

Phase

1-2

Groups that have been masked

No information

Sample size
Target sample size: **50**
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
Research Ethics Committee of the Iran University of Medical Sciences
Street address
Next to Milad Tower, Hemmat highway
City
Tehran
Postal code
15459-13487
Approval date
2017-09-23, 1396/07/01
Ethics committee reference number
IR.IUMS.FMD.REC1396.9311174023

Health conditions studied

1

Description of health condition studied
End-stage renal disease
ICD-10 code
N18.5
ICD-10 code description
Chronic kidney disease, stage 5

Primary outcomes

1

Description
Glomerular filtration rate
Timepoint
After patients transfer to ICU, then every one hours until 6 hours after transfer to ICU, then every two hours until 24 hours after ICU and then every 6 hours until the time of discharge
Method of measurement
Biochemistry analyzer

2

Description
Creatinine
Timepoint
After patients transfer to ICU, then every one hours until 6 hours after transfer to ICU, then every two hours until 24 hours after ICU and then every 6 hours until the time of discharge
Method of measurement
Biochemistry analyzer

3

Description
Urea
Timepoint
After patients transfer to ICU, then every one hours until 6 hours after transfer to ICU, then every two hours until 24 hours after ICU and then every 6 hours until the time of discharge
Method of measurement
Biochemistry analyzer

4

Description
Sodium
Timepoint
After patients transfer to ICU, then every one hours until 6 hours after transfer to ICU, then every two hours until 24 hours after ICU and then every 6 hours until the time of discharge
Method of measurement
Biochemistry analyzer

5

Description
Hemoglobin
Timepoint
After patients transfer to ICU, then every one hours until 6 hours after transfer to ICU, then every two hours until 24 hours after ICU and then every 6 hours until the time of discharge
Method of measurement
Hematology analyzer

6

Description
Hematocrit
Timepoint
After patients transfer to ICU, then every one hours until 6 hours after transfer to ICU, then every two hours until 24 hours after ICU and then every 6 hours until the time of discharge
Method of measurement
Hematology analyzer

Secondary outcomes

empty

Intervention groups

1

Description
Control
Category
Placebo

2

Description
Dexmedetomidine infusion with dose of 1 mcg/kg/hour
Category
Treatment - Drugs

Recruitment centers

1

Recruitment center
Name of recruitment center
Hashemi Nejad Urology Hospital
Full name of responsible person
Dr Mehrdad Mesbah Kiaee
Street address
Valinejad Alley, Valiasr St
City
Tehran

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice-chancellor for Research, Iran University of Medical Sciences
Full name of responsible person
Dr Seyed Kazem Malakouti
Street address
Office of Vice-chancellor for Research, Iran University of Medical Sciences
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 for Research, Iran 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
Iran University of Medical Sciences
Full name of responsible person
Dr Mehrdad Mesbah Kiaee
Position
Faculty member
Other areas of specialty/work
Street address
Next to Milad Tower, Hemmat highway
City
Tehran
Postal code
1593748711
Phone
+98 21 8670 2503
Fax
Email
dr.mmesbah@gmail.com
Web page address
http://iums.ac.ir/

Person responsible for scientific inquiries

Contact
Name of organization / entity
Iran University of Medical Sciences
Full name of responsible person
Dr Mehrdad Mesbah Kiaee
Position
Faculty member
Other areas of specialty/work
Street address
Next to Milad Tower, Hemmat highway
City
Tehran
Postal code
1593748711
Phone
+98 21 8670 2503
Fax
Email
dr.mmesbah@gmail.com
Web page address
http://iums.ac.ir/

Person responsible for updating data

Contact
Name of organization / entity
Iran University of Medical Sciences
Full name of responsible person
Dr Mehrdad Mesbah Kiaee
Position
Faculty member
Other areas of specialty/work

Street address
Next to Milad Tower, Hemmat highway
City
Tehran
Postal code
1593748711
Phone
+98 21 8670 2503
Fax
Email
dr.mmesbah@gmail.com
Web page address
http://iums.ac.ir/

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