Clinical Trial Protocol
Iranian Registry of Clinical Trials

23 Sep 2026

evaluating the effect of remote ischemic preconditioning on cadaveric transplanted kidney function

Protocol summary

Summary

kidney transplantation is the final treatment of ESRD patients.A major limitation of this method is the shortage of organ donations.The other hand, an aging population and an increasing number of patients with ESRD leads to an increased need to kidney transplantation.So trend to use marginal kidneys have increased. One of the problems in the process of organ transplantation Which leads to dysfunction of the transplanted kidney,are Ischemia and reperfusion.Therefore, ways to avoid or treat Ischemia and reperfusion May lead to improved results, particularly of marginal cadaveric kidney transplantation. One way in which numerous studies have shown beneficial are Remote Ischemic Preconditioning. Remote Ischemic Preconditioning Means of creating transient ischemia in an organ to protect the fonction of another ischemic organ.As in organ transplantation or post-infarction occurs.Although most studies which have been done,were on the subject of myocardial infarction or stroke .the conventional method of RIP is to conect Blood pressure cuff on the limb of a patient And Wind it up to 200 mm Hg and After 10 minutes, we emptied cuff.10 minutes later we repeated the same action and This is repeated 2 to 3 times.And then the main ischemic process like Liver or kidney transplants, are performed.there are limited clinical trial studies which evaluate the protective effect of Remote Ischemic Preconditioning.In this study we tryto evaluate the protective effect of RIP on cadaveric kidney function .

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2017042333489N2**
Registration date: **2017-06-14, 1396/03/24**
Registration timing: **retrospective**
Last update:
Update count: **0**

Registration date

2017-06-14, 1396/03/24

Registrant information

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Name of organization / entity
Mashhad University of Medical Sciences
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Recruitment status

Recruitment complete

Funding source

From Mashhad University of Medical Sciences Research sources

Expected recruitment start date

2015-03-20, 1393/12/29

Expected recruitment end date

2016-03-19, 1394/12/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

evaluating the effect of remote ischemic preconditioning on cadaveric transplanted kidney function

Public title

evaluating the effect of remote ischemic preconditioning on cadaveric transplanted kidney function

Purpose

Prevention

Inclusion/Exclusion criteria

(Inclusion criteria:all the cadaveric donors which are admitted to the Montaserieh hospital and enrolled in the service of a single surgical group) (Exclusion criteria:The patients ready for second transplantation;unstable cadaveric patints;the single kidney patients;the lower limbs traumatic patients;Patient dissatisfaction; when the kidneys are transplanted as en block to a recipient;Patients with advanced diabetes and vascular disease of the lower extremities; Persons under 12 years; adults over 55 years are excluded)

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **50**

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

Mashhad University of Medical Sciences

Street address

Qureshi building ,University Avenue

City

mashhad

Postal code

Approval date

2014-09-23, 1393/07/01

Ethics committee reference number

IR.mums.rec.1393.23922690

Health conditions studied

1

Description of health condition studied

kidney transplantation

ICD-10 code

N18

ICD-10 code description

Chronic kidney disease

Primary outcomes

1

Description

primary transplanted kidney function

Timepoint

after kidney transplantation we evaluate the urine volume every hour and check serum creatinin level 2,12 and 24 hour after sugery.and then daily upto one week and so every week upto one month.

Method of measurement

after kidney transplantation we evaluate the urine volume every hour and check serum creatinin level 2,12 and 24 hour after sugery.and then daily upto one week and so every week upto one month.we calculate GFR of patient with MDRD formula.

Secondary outcomes

1

Description

Need to dialysis again

Timepoint

after kidney transplantation we evaluate the urine volume every hour and check serum creatinin level 2,12 and 24 hour after sugery.and then daily upto one week and so every week upto one month.we calculate GFR of patient with MDRD formula.

Method of measurement

after kidney transplantation we evaluate the urine volume every hour and check serum creatinin level 2,12 and 24 hour after sugery.and then daily upto one week and so every week upto one month.we calculate GFR of patient with MDRD formula.

Intervention groups

1

Description

In the intervention group who are selected randomly, the blood pressure Cuff on the right leg at the hip of receiver are closed And inflated to 200mmHg And 10 minutes at the same pressure remains.then The cuff become completely empty.And then the cuff is attached to left thigh and Up to 200 mmg inflated for 10 minutes.And then goes empty.and then The organ donation is done routinely.

Category

Prevention

2

Description

In the control group blood pressure cuff is closed on the

patient's lower extremity but it is not inflated

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Montaserieh Hospital

Full name of responsible person

Dr salman soltani

Street address

Chamran Avenue

City

Mashhad

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Mashhad University of Medical Sciences

Full name of responsible person

Dr Mahmood Tavakkoli

Street address

Daneshgah Avenue

City

Mashhad

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Mashhad 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

Montaserie Hospital, Mashhad University of Medical Sciences

Full name of responsible person

Dr Salman Soltani

Position

Assistant professor

Other areas of specialty/work

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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