Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

The effect of Ceftazidime and Cloxacillin as an antibiotic lock solution for prevention of hemodialysis tunneled-catheter related blood stream infection in patients with chronic kidney disease

Protocol summary

Summary

The aim of this clinical trial study was to evaluate the effect of Ceftazidime and Cloxacillin as an antibiotic lock solution for prevention of hemodialysis tunneled-catheter related blood stream infection. From patients with chronic kidney disease requiring dialysis with tunneled hemodialysis catheter referring to hemodialysis center of Tohid hospital, Sanandaj, Iran total of 40 patients were selected and randomly divided into intervention and control groups. Inclusion criteria included: patients with chronic kidney disease requiring dialysis with tunneled hemodialysis catheter. Exclusion criteria included: changing vascular access to AVF, kidney transplant during the study, transferring patients to other centers, patients' unwillingness to participate in the study, using Taurolock as lock solution, patients who were candidate for antibiotic prescription for reasons other than CRBSI. In the intervention group based on the volume recorded on the catheter 10 mg / ml ceftazidime plus 100 mg / ml cloxacillin and 5000 units of heparin injected into the lumen of the catheter after each hemodialysis session and catheter locked. In the control group only 5000 units of heparin injected into the lumen of the catheter after each hemodialysis session and catheter locked. All patients were examined during the dialysis for catheter infection, adverse drug reactions, skin reactions and other side effects.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2017060212789N15**
Registration date: **2017-07-18, 1396/04/27**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2017-07-18, 1396/04/27

Registrant information

Name
Masoud Rasolabady
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Recruitment status

Recruitment complete

Funding source

Vice Chancellor for Research of Kurdistan University of Medical Sciences

Expected recruitment start date

2016-09-22, 1395/07/01

Expected recruitment end date

2017-05-22, 1396/03/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of Ceftazidime and Cloxacillin as an antibiotic lock solution for prevention of hemodialysis tunneled-catheter related blood stream infection in patients with chronic kidney disease

Public title

Effect of Ceftazidime and Cloxacillin for prevention of

hemodialysis tunneled -catheter related blood stream infection

Purpose
Prevention

Inclusion/Exclusion criteria
Inclusion criteria: patients with chronic kidney disease requiring dialysis with tunneled hemodialysis catheter. Exclusion criteria: changing vascular access to AVF; kidney transplant during the study; transferring patients to other centers; patients' unwillingness to participate in the study; using Taurolock as lock solution; patients who were candidate for antibiotic prescription for reasons other than CRBSI.

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

Gender
Both

Phase
3

Groups that have been masked
No information

Sample size
Target sample size: **40**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics committee of Kurdistan university of Medical Sciences

Street address
Kurdistan university of Medical Sciences,Pasdaran St., Sanandaj , Iran

City
Sanandaj

Postal code

Approval date
2016-05-14, 1395/02/25

Ethics committee reference number
IR.MUK.REC.1395.60

Health conditions studied

1

Description of health condition studied
Bacterial infection, unspecified

ICD-10 code
A49.9

ICD-10 code description
Bacteraemia NOS

Primary outcomes

1

Description
Catheter-related bloodstream infection (CRBSI)

Timepoint
After each session hemodialysis for six months

Method of measurement
Clinical examination of infection and blood culture

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: based on the volume recorded on the catheter 10 mg / ml ceftazidime plus 100 mg / ml cloxacillin and 5000 units of heparin injected into the lumen of the catheter after each hemodialysis session and catheter locked

Category
Treatment - Drugs

2

Description
Control group: 5000 units of heparin injected into the lumen of the catheter after each hemodialysis session and catheter locked.

Category
Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center
Tohid Hospital

Full name of responsible person
Dr. Jamal Modares Gorgi

Street address
Tohid Hospital, Geryashan St., Basij Sq., Sanandaj, Iran

City
Sanandaj

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice Chancellor for Research of Kurdistan University of Medical Sciences
Full name of responsible person
Dr. Ebrahim Ghaderi
Street address
Kurdistan university of Medical Sciences,Pasdaran St., Sanandaj , Iran
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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 for Research of Kurdistan 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
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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