Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

Prophylactic effect of bolus and continuous Cefazolin injection in off-pump CABG

Protocol summary

Summary

This prospective randomized clinical trial study was conducted on 141 patients. Patients without history of antibiotic therapy during the last 72 hours before surgery; no severe renal and liver failure and pregnancy; no active infection. All patients didn't consent to use this procedure in the study. We can't use full dose of cefazolin and excise of sign of infection during administering antibiotic. The patients divided into two groups: continuous infusion group and intermittent group. In this study evaluation of infections was based on superficial type of surgical site infection. Duration of follow- up was 4 weeks. Data analyzed by Chi- square test and t-test.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2014041917026N1**
Registration date: **2014-04-19, 1393/01/30**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2014-04-19, 1393/01/30

Registrant information

Name

Ali Akbar Karimi Bondarabadi

Name of organization / entity

Shahid Sadoughi University of Medical Sciences

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Recruitment status

Recruitment complete

Funding source

Shahid Sadoughi University of Medical Sciences, Yazd

Expected recruitment start date

2012-03-20, 1391/01/01

Expected recruitment end date

2013-03-21, 1392/01/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Prophylactic effect of bolus and continuous Cefazolin injection in off-pump CABG

Public title

Cefazolin injection in off-pump CABG

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: patients without history of antibiotic therapy during the last 72 hours before surgery; no severe renal and liver failure and pregnancy; no active infection. Exclusion criteria: all patients didn't consent to use this procedure in the study. we can't use full dose of cefazolin and excise of sign of infection during administering antibiotic.

Age

No age limit

Gender

Both

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: **141**

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

Yazd Cardiovascular Research Center, Afshar Hospital, Shahid Sadoughi University of Medical Sciences

Street address

Shahid Ghandi Blv- Ebne Sina Ave

City

Yazd

Postal code

Approval date

2010-09-23, 1389/07/01

Ethics committee reference number

616

Health conditions studied

1

Description of health condition studied

Infection after cardiac surgery

ICD-10 code

B95.6,B95.

ICD-10 code description

Other staphylococcus as the cause of diseases classified to other chapters,Staphylococcus aureus as the cause of diseases classified to other chapters

Primary outcomes

1

Description

Infection

Timepoint

One month

Method of measurement

Clinical evidence and paraclinical lab

Secondary outcomes

empty

Intervention groups

1

Description

In Bolus group, for patients undergoing Off- Pump Coronary Artery Bypass Graft surgery. Patients in this group received 2g of Cefazolin as a starting dose, 30 minutes before incision. Then 1g of Cefazolin were administered at 3, 11 and 19 hours after starting dose respectively .therefore, overall 5gr cefazolin administered intravenously .after surgery,we survey clinical examinations and paraclinical tests .then we follow –up patients during one month about post-operative infections.

Category

Prevention

2

Description

In continuous group, for patients undergoing Off- Pump Coronary Artery Bypass Graft surgery. Patients in this group received 2g of Cefazolin as a starting dose, 30 minutes before incision. Then 3g of Cefazolin continuously infused during 24 hours. Therefore, overall 5gr cefazolin administered intravenously .after surgery,we survey clinical examinations and paraclinical tests .then we follow –up patients during one month about post-operative infections.

Category

Prevention

Recruitment centers

1

Recruitment center

Name of recruitment center

Yazd Afshar hospital

Full name of responsible person

Street address

City

yazd

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shahid sadoughi university of medical science, Yazd

Full name of responsible person

Fatemeh Ezoddini Ardakani

Street address

2th floor- the building number one of Shahid Sadoughi Uuniversity of Medical Sciences- Bahonar sq, Yazd

City
Yazd
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Shahid sadoughi university of medical science, Yazd
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
Shahid Sadoughi University of Medical Sciences, Yazd, Iran
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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