Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

The comparison of metoprolol and carvedilol in prevention of AF after CABGS

Protocol summary

Study aim
Comparison of the effect of cartidilol and metoprolol on the incidence of AF after cardiac surgery in patients undergoing open heart surgery in Imam Ali Hospital in 1997

Design
To assign people to two groups, randomization is done by blocking method, which each intervention patient receives. As such, 6 blocks of 4 are provided as follows.1) AABB 2) ABAB 3) ABBA 4) BBAA 5) BABA 6) BAAB Block selection is based on the random number table. Group A patients receiving metoprolol and B patient receiving cartidilol.

Settings and conduct
In this study, double blind blindness is used so that the patient and the investigator who applies the interventions are not aware of the interventions. . After transferring patients to the department, monitoring of the 24-hourly electrocardiogram will be performed for five days

Participants/Inclusion and exclusion criteria
. The criteria for entering the study will be all patients who undergo cardiac surgery due to coronary artery disease or valvular abnormalities, preoperative beta-blocker therapy (propranol, metoprolol, cartidilol for heart rate of 60 to 70 Minutes) and obtaining written consent, patients with prior history of atrial fibrillation, receive class I, II antiarrhythmic drugs, digoxin, permanent or temporary pacemakers, each grade from the heart block, bradycardia with heart rate less than 50, end-stage renal disease (ESRD)), Severe pulmonary disease (pneumonia, COPD) and severe liver disease (cirrhosis or hepatitis folinitis) They will not be included in the study.

Intervention groups
In this randomized clinical trial, patients undergoing non-emergency open heart surgery candidates admitted to Ali ibn Abitaleb Zahedan Hospital will be divided into two groups of metoprolol, cartidilol to prevent the onset of AF.

Main outcome variables
AF incidence in patients after open heart surgery

General information

Reason for update

Acronym
AFCABG

IRCT registration information
IRCT registration number: **IRCT20181110041604N1**
Registration date: **2019-04-13, 1398/01/24**
Registration timing: **registered_while_recruiting**

Last update: **2019-04-13, 1398/01/24**
Update count: **0**

Registration date
2019-04-13, 1398/01/24

Registrant information

Name
aylar ghavanjzade

Name of organization / entity

Country
Iran (Islamic Republic of)

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+98 17 3329 4209

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2019-01-21, 1397/11/01

Expected recruitment end date
2019-09-23, 1398/07/01

Actual recruitment start date
empty

Actual recruitment end date
empty
Trial completion date
empty

Scientific title
The comparison of metoprolol and carvedilol in prevention of AF after CABGS

Public title
The comparison of metoprolol and carvedilol in prevention of AF after CABGS
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
The criteria for entry into the study will be all patients who undergo cardiac surgery due to coronary artery disease or valvular disorders
Exclusion criteria:
Previous history of atrial fibrillation Receiving class I, II antiarrhythmic drugs Digoxin Permanent or temporary pacemaker Each grade of the heart block - Bradycardia with heart rate less than 50 Dialysis patients Severe pulmonary disease Heavy liver disease
Age
No age limit
Gender
Both

Phase
2
Groups that have been masked

- Participant
- Care provider
- Investigator

Sample size
Target sample size: **170**
Randomization (investigator's opinion)
Randomized
Randomization description
To assign people to two groups, randomization is done by blocking method, which each intervention patient receives. As such, 6 blocks of 4 are provided as follows. 1) AABB 2) ABAB 3) ABBA 4) BBAA 5) BABA 6) BAAB Block selection is based on the random number table. Group A patients receiving metoprolol and B patient receiving cartidilol.
Blinding (investigator's opinion)
Double blinded
Blinding description
To assign people to two groups, randomization is done by blocking method, which each intervention is receiving. Patients and physicians are not aware of blind blindness. Block selection is based on the random number table. Group A patients receiving metoprolol and B patient receiving carveidilol.
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of Zahedan University of Medical Sciences
Street address
Imam Ali Hospital ,Khalij Fars Blvd
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Zahedan
Province
Sistan-va-Balouchestan
Postal code
9817959515
Approval date
2019-01-30, 1397/11/10
Ethics committee reference number
IR.ZAUMS.REC.1397.250

Health conditions studied

1

Description of health condition studied
AF
ICD-10 code
I48.0
ICD-10 code description
Paroxysmal atrial fibrillation

Primary outcomes

1

Description
AF after surgery
Timepoint
5 days after surgery
Method of measurement
ECG

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Patients who receive metoral
Category
Treatment - Drugs

2

Description
Intervention group: Patients receiving carvedilol
Category
Treatment - Drugs

Recruitment centers

1

Recruitment center
Name of recruitment center
Imam Ali hospital Zahedan
Full name of responsible person
Aylar Ghavanjzade
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Zahedan University of Medical Sciences
Full name of responsible person
Deputy of Research of Zahedan University of Medical Sciences-Dr Shahraki
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Web page address
http://Zaums.ac.ir/default.page
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Zahedan University of Medical Sciences
Proportion provided by this source
20
Public or private sector
Public
Domestic or foreign origin
Domestic
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
Academic

Person responsible for general inquiries

Contact
Name of organization / entity
Zahedan University of Medical Sciences
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Aylar.Ghavanjzade
Position
Resident
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD
No more information

Study Protocol
No - There is not a plan to make this available

Statistical Analysis Plan
No - There is not a plan to make this available

Informed Consent Form
No - There is not a plan to make this available

Clinical Study Report
No - There is not a plan to make this available

Analytic Code
No - There is not a plan to make this available

Data Dictionary
No - There is not a plan to make this available