

Clinical Trial Protocol

Iranian Registry of Clinical Trials

16 Sep 2026

Comparison of the Hemodynamic Changes of two regimens thiopental Na - ketamin & etomidate during anesthesia induction in low EF CABG patients

Protocol summary

Summary

Etomidate is the only hypnotic drug that when injected for induction of anaesthesia and laryngoscopy has minimal or no effect on hemodynamic. Despite this great advantage, etomidate has suppressing effect on producing steroids from adrenal gland. Adrenal suppression can be dangerous in septic and critically ill patients and can cause increase in mortality and morbidity in these patients. In this study we will combine two kind of drugs for induction of anaesthesia one with excitatory effect (ketamine) and one with inhibitory effect (Nesdonal) on cardiovascular system; and compare their effect on hemodynamic vs etomidate. 100 patients randomly will separate in two groups of 50. Systolic, diastolic and mean arterial pressure and heart rate before induction as baseline, one minute after induction and before, 1, 2 & 3 minute after laryngoscopy will be measure.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201309242883N4**
Registration date: **2014-01-08, 1392/10/18**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2014-01-08, 1392/10/18

Registrant information

Name

Mohammadreza Habibi

Name of organization / entity

Mazandaran University of Medical Sciences and Health

Services

Country

Iran (Islamic Republic of)

Phone

+98 15 1222 3023

Email address

mhabibi@mazums.ac.ir

Recruitment status

Recruitment complete

Funding source

Mazandaran University of Medical Sciences and Health
Services Deputy of Research

Expected recruitment start date

2011-09-23, 1390/07/01

Expected recruitment end date

2013-07-23, 1392/05/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the Hemodynamic Changes of two regimens thiopental Na - ketamin & etomidate during anesthesia induction in low EF CABG patients

Public title

Effect of ketamin- nesdonal combination in induction of anaesthesia in CABG patient with low ejection fraction

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: 1- Elective surgery 2-Age range 40 to 70 3-EF low than 50% Exclusion criteria: 1- Adrenal insufficiency 2-Intake of etomidate or nesdonal in one week 3-Cortisol intake in six month 4-sensitivity to

etomidate or nesdonal 5-sepsis, endocaditis, chronic inflammatory disaeses 6-sever norologic or psychiatric diseases 7-any other operation with CABG 8-CABG with great vessel operation (et.bental) 9-dificult intubation(laryngoscopy more than 30 secend)

Age

From **40 years** old to **70 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **100**

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

Mazandaran University of Medical Sciences

Street address

serah Jouibar, Valiasr Ave.

City

Sari

Postal code

Approval date

2012-02-14, 1390/11/25

Ethics committee reference number

1496

Health conditions studied

1

Description of health condition studied

Atherosclerotic cardiovascular disease

ICD-10 code

I25.0

ICD-10 code description

Atherosclerotic cardiovascular disease

Primary outcomes

1

Description

systolic blood pressure

Timepoint

before aneesthesia, one minute after injection of hypnotic, one minute before,1,2&3 minute after laryngoscopy

Method of measurement

Invasive bloob pressure monitor

2

Description

diastolic blood pressure

Timepoint

before aneesthesia, one minute after injection of hypnotic, one minute before,1,2&3 minute after laryngoscopy

Method of measurement

Invasive bloob pressure monitor

3

Description

mean arterial blood pressure

Timepoint

before aneesthesia, one minute after injection of hypnotic, one minute before,1,2&3 minute after laryngoscopy

Method of measurement

Invasive bloob pressure monitor

Secondary outcomes

1

Description

heart rate per minute

Timepoint

before aneesthesia, one minute after injection of hypnotic, one minute before,1,2&3 minute after laryngoscopy

Method of measurement

manitor

Intervention groups

1

Description

Control group: Induction of aneesthesia with etomidate 0.2 mg/kg

Category

Treatment - Other

2

Description

Intervention group: Induction of aneesthesia with

nesdonal 3mg/kg+ ketamin 1mg/kg
Category
Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center
Fatemezahra Hospital
Full name of responsible person
Dr. Mohammadreza Habib
Street address
Artesh Blv.
City
Sari

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Mazandaran University of Medical Sciences and Health Services
Full name of responsible person
Ahmad Ali Enayati
Street address
Deputy of Research, Moalem sq
City
Sari
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Mazandaran University of Medical Sciences and Health Services
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
Mazandaran University of Medical Sciences
Full name of responsible person
Dr. Mohammadreza Habib
Position
Assistant Professor; Fellowship of Cadiac Anesthesia
Other areas of specialty/work

Street address
Mazandaran Heart Center; fattermeh alzahra Hos. Sari
City
SARI
Postal code
Phone
+98 15 1222 3023
Fax
+98 15 1222 4002
Email
mohammadreza.habibi@gmail.com
Web page address
www.mazums.ac.ir

Person responsible for scientific inquiries

Contact

Name of organization / entity
Mazandaran University of Medical Sciences
Full name of responsible person
Dr. Mohammadreza Habib
Position
Assistant Professor; Fellowship of Cadiac Anesthesia
Other areas of specialty/work
Street address
Mazandaran Heart Center; fattermeh alzahra Hos.
City
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Postal code
Phone
+98 15 1222 3023
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+98 15 1222 4002
Email
mohammadreza.habibi@gmail.com
Web page address
www.mazums.ac.ir

Person responsible for updating data

Contact

Name of organization / entity
Mazandaran University of Medical Sciences
Full name of responsible person
Dr. Mohammadreza Habib
Position
Assistant Professor; Fellowship of Cadiac Anesthesia
Other areas of specialty/work
Street address
Mazandaran Heart Center; fattermeh alzahra Hos.
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Postal code
Phone
+98 15 1222 3023
Fax
Email
mohammareza.habibi@gmail.com
Web page address
www.mazums.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