

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jun 2026

Effects of intravenous lipid emulsion on improve cardiac function after open heart surgery

Protocol summary

Summary

Purpose: Clinical trial effect of intravenous lipid emulsion on improve cardiac function after open heart surgery. A total of 60 patients who underwent open heart surgery and in the ICU were hospitalized to be chosen and a double blind (Researchers and patients were unaware of the drugs) randomized using a random number table is divided into two groups. The patient in group 1 was injected normal saline (500cc) and in group 2 was injected intravenous lipid (500cc) (construction company Frezenius) emulsion 20%. During the 3-hour infusion of both solutions at 1cc /kg /h, then (EF) Ejection Fraction was measured. Inclusion criteria: Candidate for CABG surgery; consent to participate in research; The first surgery of CABG; Ef above 35 ; BMI less than 30 ; lack of familial metabolic disorder; no need for mechanical ventilation and inotrope Exclusion criteria: re-heart surgery; need to balloon pump; rate disorder during surgery and then. Primary outcome: improved heart function using echo devices before surgery and after surgery were evaluated. Secondary outcome: stay in the intensive care unit of admission in ICU after surgery until discharge or transfer to the criteria.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016092412094N5**

Registration date: **2017-01-31, 1395/11/12**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2017-01-31, 1395/11/12

Registrant information

Name

Majid Razavi

Name of organization / entity

Mashhad University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 915 110 8630

Email address

razavim@mums.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice Chancellor for Research, Mashhad University of Medical Sciences

Expected recruitment start date

2014-12-11, 1393/09/20

Expected recruitment end date

2015-05-11, 1394/02/21

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effects of intravenous lipid emulsion on improve cardiac function after open heart surgery

Public title

Clinical trial effect of intravenous lipid emulsion on improve cardiac function after open heart surgery

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Candidate for CABG surgery; consent to participate in research; The first surgery of CABG; EF above 35 ; BMI less than 30 ; lack of familial metabolic disorder; no need for mechanical ventilation and inotrope

Exclusion criteria: re-heart surgery; need to balloon pump; rate disorder during surgery and then

Age

No age limit

Gender

Both

Phase

2-3

Groups that have been masked

No information

Sample size

Target sample size: 60

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

Ethics Committee of Mashhad University of Medical Sciences

Street address

Ghoreishi apartment, Daneshgah street, Mashhad

City

Mashhad

Postal code

Approval date

2014-11-22, 1393/09/01

Ethics committee reference number

IR.MUMS.REC.1393.193

Health conditions studied

1

Description of health condition studied

cardiac disease

ICD-10 code

I25.1

ICD-10 code description

Atherosclerotic heart disease

Primary outcomes

1

Description

Ejection Fraction

Timepoint

Before and after surgery

Method of measurement

Echocardiography device

Secondary outcomes

1

Description

Stay in intensive care units

Timepoint

Since admission to the ICU after surgery until discharge or transfer to the

Method of measurement

Observation

Intervention groups

1

Description

Intervention group: injected 500cc intravenous lipid (construction company Frezenius) emulsion 20% injected during the 3 hours at 1cc/kg/h.

Category

Treatment - Drugs

2

Description

Control group: Patients received 500 cc normal saline during the 3-hours at 1cc /kg /h

Category

Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center

Imam Reza Hospital

Full name of responsible person

Dr Majid Razavi

Street address

City

Mashhad

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice Chancellor for Research, Mashhad University of Medical Sciences

Full name of responsible person

Dr Mohsen Tafaghodi

Street address

Ghoreishi apartment, Daneshgah street, Mashhad

City

Mashhad

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, 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

Mashhad University of Medical Sciences

Full name of responsible person

Dr Majid Razavi

Position

Anesthesiologist

Other areas of specialty/work

Street address

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Person responsible for scientific inquiries

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Full name of responsible person

Dr Majid Razavi

Position

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Other areas of specialty/work

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Person responsible for updating data

Contact

Name of organization / entity

Mashhad University of Medical Sciences

Full name of responsible person

Dr Saeed Daghestani

Position

Resident of Anesthesiology

Other areas of specialty/work

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Fax

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Web page address

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