

Clinical Trial Protocol

Iranian Registry of Clinical Trials

09 Jun 2026

The effect of blood glucose control with insulin on hyperglycemia during and after coronary artery bypass grafting surgery in non-diabetic patients.

Protocol summary

Summary

Evidence reveals high incidence of hyperglycemia in NON_DIABETICS undergoing major operations such as cardiac surgery. The aim of this study is to evaluate the effect of INTRA-OPERATIVE glycemic control to preventing hyperglycemia DURING and AFTER cardiac surgery. Sixty adult non-diabetic patients who undergoing elective coronary artery bypass grafting surgery randomly divided to 2 groups(each group n=30). First group received insulin infusion during operation according to a established protocol to maintain blood glucose within 110-140 mg/dl. Blood glucose(BG) of patients of second (control) group only monitored every 30 min (such as First group) and received bolus insulin only when BG> 250 mg/dl. All patients' BG measured in every 2 hours after operation until 24h, and every 6h until discharge from ICU. Also postoperative complications recorded.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138705291049N1**
Registration date: **2008-09-27, 1387/07/06**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2008-09-27, 1387/07/06

Registrant information

Name

Rasoul Azarfarin

Name of organization / entity

Tabriz University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

3357310 411 +98

Email address

azarfarinr@tbzmed.ac.ir

Recruitment status

Recruitment complete

Funding source

Tabriz University of Medical Sciences

Expected recruitment start date

2008-06-21, 1387/04/01

Expected recruitment end date

2009-06-20, 1388/03/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of blood glucose control with insulin on hyperglycemia during and after coronary artery bypass grafting surgery in non-diabetic patients.

Public title

Blood glucose control with insulin in non-diabetic patients undergoing cardiac operation.

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Elective coronary artery bypass grafting surgery, American anesthesiologists Association (ASA) physical status class I and II exclusion criteria : Patients refuse to participate into study, Diabetes mellitus, Taking drugs that affect on blood glucose, Pre-operative unstable hemodynamic or taking inotrop

drugs, unexpected event during operation.

Age

From **18 years** old to **79 years** old

Gender

Both

Phase

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)

Single blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Regional Ethics committee of Tabriz University of
Medical Sciences

Street address

Daneshgah st.

City

Tabriz

Postal code

5166614776

Approval date

2008-06-19, 1387/03/30

Ethics committee reference number

872

Health conditions studied

1

Description of health condition studied

Hyperglycemia in patients undergoing cardiac surgery

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Hyperglycemia

Timepoint

During and early post-operative period

Method of measurement

Blood glucose measurement

Secondary outcomes

1

Description

Post-operative complications (neurologic, infectius, ...)

Timepoint

post-operative period

Method of measurement

Clinical examination

Intervention groups

1

Description

Insulin infusion/no insulin infusion

Category

empty

Recruitment centers

1

Recruitment center

Name of recruitment center

Madani Heart Hospital

Full name of responsible person

Street address

Daneshgah st.

City

Tabriz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Tabriz University of Medical Sciences

Full name of responsible person

Abdol-hassan Kazemi

Street address

Daneshgah st.

City

Tabriz

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Tabriz 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
Tabriz University of Medical Sciences
Full name of responsible person
Rasoul Azarfarin
Position
Associate professor in anesthesiology
Other areas of specialty/work
Street address
Madani Heart Hospital, Daneshgah st.
City
Tabriz
Postal code
Phone
+98 41 1336 0894
Fax
Email
azarfarinr@tbzmed.ac.ir
Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity
Tabriz University of Medical Sciences
Full name of responsible person
Rasoul Azarfarin
Position
Associate professor in anesthesiology
Other areas of specialty/work
Street address

Madani Heart Hospital, Daneshgah st.
City
Tabriz
Postal code
Phone
+98 41 1336 0894
Fax
Email
azarfarinr@tbzmed.ac.ir
Web page address

Person responsible for updating data

Contact

Name of organization / entity
Full name of responsible person
Rasoul Azarfarin
Position
Other areas of specialty/work
Street address
City
Postal code
Phone
Fax
Email
azarfarinr@tbzmed.ac.ir
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