

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Sep 2026

Assessing the effects of not using maintenance dose of atracurium during open heart surgery in Coronary Artery Bypass Graft patients

Protocol summary

Summary

Due to importance of early extubation of patients within 6 to 8 hours after arrival to ICU and shortening the length of their stay in ICU, which is called fast tract recovery, we try to compare the effects of bolus and maintenance dose of neuromuscular blocker atracurium in fast tract recovery and early extubation of patients and their probable movement during surgery in single bolus dose, which interfere with the surgeon field, undergoing open heart Coronary Artery Bypass Graft surgery and come in to conclusion if maintenance dose is necessary. Inclusion criteria: 18-75 years old patients planned to go under elective coronary artery bypass graft. Exclusion criteria: myopathy, neuropathy, severe renal and pulmonary disease, emergency surgeries and opium addiction. One hundred patients were evaluated in two different single blinded randomized groups; group B used bolus dose of atracurium and group M treated with maintenance doses of Atracurium. The study groups were compared by demographic, hemodynamic, fast-track and extubation time and ICU admission time.

General information

Acronym

CABG:coronary artery bypass

IRCT registration information

IRCT registration number: **IRCT201012295496N1**

Registration date: **2012-01-01, 1390/10/11**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2012-01-01, 1390/10/11

Registrant information

Name

Ata Garajei

Name of organization / entity

Tehran University of Medical Sciences

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Recruitment status

Recruitment complete

Funding source

Tehran University of Medical Sciences ,vice chancellor for research

Expected recruitment start date

2011-01-01, 1389/10/11

Expected recruitment end date

2011-06-01, 1390/03/11

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Assessing the effects of not using maintenance dose of atracurium during open heart surgery in Coronary Artery Bypass Graft patients

Public title

Assessing the effects of not using maintenance dose of atracurium during open heart surgery in Coronary Artery Bypass Graft patients

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criterion: 18-75y old patients planned to go under Coronary Artery Bypass Graft surgery. Exclusion criteria: myopathy; neuropathy; severe pulmonary or

renal disease; emergency surgery and opium addiction

Age

From **18 years** old to **75 years** old

Gender

Both

Phase

1

Groups that have been masked

No information

Sample size

Target sample size: **100**

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

Ethics committee of Tehran University of Medical Sciences

Street address

Next to Milad Hospital, Hemat highway

City

Tehran

Postal code

Approval date

2010-08-20, 1389/05/29

Ethics committee reference number

42120

Health conditions studied

1

Description of health condition studied

Coronary artery bypass graft

ICD-10 code

T82

ICD-10 code description

Complications of cardiac and vascular prosthetic devices, implants and grafts

Primary outcomes

1

Description

Extubation time

Timepoint

6 to 8 hours after surgery

Method of measurement

Extubation criteria as Acid blood gass

2

Description

Probable patients movement during surgery

Timepoint

During surgery

Method of measurement

Visual and Train of four

Secondary outcomes

1

Description

Paralysis time

Timepoint

6 to 8 hours after surgery

Method of measurement

Hours

2

Description

ICU staying length

Timepoint

6 to 8 hours after surgery

Method of measurement

Hours

Intervention groups

1

Description

Control group: received both intubation bolous dose of atracurium and maintenance dose of atracurium

Category

Prevention

2

Description

Intervention group: received bolous dose of atracium just at intubation time

Category

Prevention

Recruitment centers

1

Recruitment center

Name of recruitment center

Rajaiee Heart Hospital Center
Full name of responsible person
Street address
City
Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Tehran University of Medical Sciences
Full name of responsible person
Vice chancellor for research
Street address
vice chancellor for research, Tehran University of
Medical Sciences, Keshavarz bulvd, Ghods Ave,
City
Tehran

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Tehran 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
Tehran University of Medical Sciences
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Person responsible for updating data

Contact

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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