

# 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 track recovery, we try to compare the effects of bolus and maintenance dose of neuromuscular blocker atracurium in fast track 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 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

##### Country

Iran (Islamic Republic of)

##### Phone

+98 21 2237 0673

##### Email address

atarajei@tums.ac.ir

##### 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  
**Full name of responsible person**  
Azadeh Emami  
**Position**  
MD  
**Other areas of specialty/work**  
**Street address**  
Rasool Akram hospital  
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**Phone**  
+98 21 2237 0673  
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**Email**  
azi\_emami@yahoo.com  
**Web page address**

## Person responsible for scientific inquiries

### Contact

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## Person responsible for updating data

### Contact

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## 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*