

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Comparison of the effect of intravenous ketorolac and paracetamol on pain after coronary artery bypass graft surgery

Protocol summary

Study aim

The effect of intravenous ketorolac and paracetamol on pain after coronary artery bypass graft surgery

Design

In this study 60 patients undergoing CaBG in Ahwaz Golestan Hospital will be randomly divided into 2 groups of 30 each based on randomized number table. All patients are monitored routine electrocardiography, pulse oximetry, invasive blood pressure measurement, expiratory carbon dioxide intake will be performed. They will receive the same drugs for induction and maintenance of anesthesia . After end of surgery and transfer to intensive care unit ,necessary monitoring ECG, IBP, Pulse Oximeter will be attached,thereafter the first group received 10 mg / kg of paracetamol diluted in 100 ml normal saline within 30 minutes, every 6 hours to 24 hours and in the second group 0.5 mg / kg diluted ketorolac in 100 cc normal saline within 30 minutes, every 6 hours to 24 hours

Settings and conduct

60 patients undergoing CABG in Ahwaz Golestan Hospital will be randomly divided into 2 groups of 30 each based on randomized number table. Kurdish. After the surgery is over and transferred to the intensive care unit The first group received 10 mg / kg of paracetamol and in the second group 0.5 mg / kg diluted ketorolac diluted in 100 ml normal saline within 30 minutes, every 6 hours to 24 hours

Participants/Inclusion and exclusion criteria

Inclusion criteria: age 30-70 years Candidate for coronary artery bypass Exclusion criteria: gastrointestinal disease, kidney disease, liver disease, ejection fraction <30%, off-pump surgery

Intervention groups

The first group received 10 mg / kg paracetamol diluted in 100 ml normal saline within 30 minutes, every 6 hours to 24 hours. The second group received 0.5 mg / kg diluted ketorolac 100 cc normal saline within 30 minutes, every 6 hours to 24 hours

Main outcome variables

Age Sex Temperature Breath rate heart beat blood pressure The amount of pain

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20180909040979N4**

Registration date: **2019-09-12, 1398/06/21**

Registration timing: **prospective**

Last update: **2019-09-12, 1398/06/21**

Update count: **0**

Registration date

2019-09-12, 1398/06/21

Registrant information

Name

MARYAM ZAMANKHANI

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 61 3336 4760

Email address

zamankhani.m@ajums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-09-23, 1398/07/01

Expected recruitment end date

2019-12-22, 1398/10/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date
empty

Scientific title
Comparison of the effect of intravenous ketorolac and paracetamol on pain after coronary artery bypass graft surgery

Public title
Comparison of the effect of intravenous ketorolac and paracetamol on pain

Purpose
Treatment

Inclusion/Exclusion criteria
Inclusion criteria:
Age between 30 and 70 years Candidate for coronary artery bypass graft
Exclusion criteria:
Gastrointestinal Disease Kidney disease Liver disease EF<30% Off pump surgery

Age
From **30 years** old to **70 years** old

Gender
Both

Phase
2-3

Groups that have been masked

- Participant
- Care provider
- Investigator

Sample size
Target sample size: **60**

Randomization (investigator's opinion)
Randomized

Randomization description
According to the random number table, they will be divided into two groups of 30 people

Blinding (investigator's opinion)
Double blinded

Blinding description
Participants, principal investigator, intensive care nurses responsible for patient care blind to study

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids
empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of Ahvaz University of Medical Sciences

Street address
Ahvaz Jundishapur University of Medical Sciences.,
Research Deputy., Blvd. Golestan

City
Ahvaz

Province
Khouzestan

Postal code
6193673166

Approval date
2019-04-27, 1398/02/07

Ethics committee reference number
IR.AJUMS.REC.1398.050

Health conditions studied

1

Description of health condition studied

Coronary artery bypass graft

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Postoperative pain control

Timepoint

0, 6, 12 and 24 hours after extubation

Method of measurement

VAS

2

Description

Arterial oxygen saturation drop

Timepoint

0, 6, 12 and 24 hours after extubation

Method of measurement

Yes or no

3

Description

Blood pressure changes

Timepoint

0, 6, 12 and 24 hours after extubation

Method of measurement

Three groups: mild to moderate

4

Description

Chest tube discharge

Timepoint

0, 6, 12 and 24 hours after extubation

Method of measurement

The volume of discharge

Secondary outcomes

1

Description

arrhythmia

Timepoint

0, 6, 12 and 24 hours after extubation

Method of measurement

monitoring

2

Description

Duration of ventilator dependence

Timepoint

0, 6, 12 and 24 hours after extubation

Method of measurement

Duration of respiratory support

Intervention groups

1

Description

Intervention group: Intervention group: Paracetamol 10mg / kg diluted in 100 ml of normal saline for 30 minutes every 6 hours up to 24 hours

Category

Treatment - Drugs

2

Description

Intervention group: and in the second group 0.5 mg / kg diluted ketorolac in 100 ml of normal saline for 30 minutes, every 6 hours up to 24 hours.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Golestan Hospital

Full name of responsible person

Fatemeh Javaherforoosh zadeh

Street address

Golestan Blvd.

City

Ahvaz

Province

Khuzestan

Postal code

6135715794

Phone

+98 61 3374 3017

Email

prc@ajums.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Ahvaz University of Medical Sciences

Full name of responsible person

Mohammad Badavi, PhD

Street address

Deputy of Research, Ahvaz Jundishapur University of Medical Sciences, Golestan Blvd.

City

Ahvaz

Province

Khuzestan

Postal code

6135715794

Phone

+98 61 3336 3738

Email

mbadavi@ajums.ac.ir

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Ahvaz University of Medical Sciences

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

Ahvaz University of Medical Sciences

Full name of responsible person

Fatemeh Javaherforoosh zadeh

Position

Associate professor

Latest degree

Subspecialist

Other areas of specialty/work

Anesthesiology

Street address

Imam Khomeini Hospital, Azadegan Ave.

City

Ahvaz

Province

Khuzestan

Postal code

6193673166

Phone

+98 61 3222 0168

Email

f_javaherforoosh@yahoo.com

Person responsible for scientific inquiries**Contact****Name of organization / entity**

Ahvaz University of Medical Sciences

Full name of responsible person

Fatemeh Javaherforoosh zadeh

Position

Associate professor

Latest degree

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Person responsible for updating data**Contact****Name of organization / entity**

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Sharing plan**Deidentified Individual Participant Data Set (IPD)**

Undecided - It is not yet known if there will be a plan to make this available

Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan

Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form

Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available