Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

Comparison of the efficacy of intracoronary and intravenous Eptifibatide and intracoronary Retaplase on coronary blood flow in patients undergoing PPCI at Dr.Heshmat hospital during 2017-2018 (Randomized clinical trial study)

Protocol summary

Study aim

Determining the Effectiveness of intracoronary and intravenous Eptifibatide and Intracoronary Reteplase on coronary artery blood flow in patients with primary percutaneous coronary intervention

Design

In this study, 160 patients who had the first acute myocardial infarction with ST elevation and who were referred to Dr.Heshmat Hospital in Rasht and who are candidates for primary angioplasty are selected. Participants are randomly assigned to three intervention groups and a control group.

Settings and conduct

This study will be conducted in patients referring to Dr.Heshmat heart hospital in Rasht , who are undergoing primary angioplasty.

Participants/Inclusion and exclusion criteria

patients 18 to 80 years of age who had STEMI for the first time and less than 12 hours of onset of symptoms has spent, and the decision to perform primary PCI is taken for them will enter the study.Patients having normal blood flow in angiography or requiring coronary artery bypass surgery are excluded from the study.

Intervention groups

Group 1: Patients who will embeded a stent after thrombosuction. Group 2: Patients who receive 180 microgram / kg of eptifibatide by intracoronary bolus in 10 minutes interval , and then stent is inserted. Group 3: Patients who receive 6 mg intracoronary reteplase after thrombosuction, and then stent is embedded. Group 4: Patients after thrombosuction will receive 180 micrograms per kilogram of intravenous bolus eptifibatide, and then receive infusion in 2 microgram per kilogram per minute for 18 hours.

Main outcome variables

coronary blood flow, left ventricular diastolic dysfunction change, ST resolution average, average of EF changes

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20170925036401N1**
Registration date: **2017-12-07, 1396/09/16**
Registration timing: **registered_while_recruiting**

Last update: **2017-12-07, 1396/09/16**
Update count: **0**

Registration date

2017-12-07, 1396/09/16

Registrant information

Name

mostafa zadkamali

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 13 3333 6394

Email address

mzadkamali@gums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2017-12-01, 1396/09/10

Expected recruitment end date

2018-04-19, 1397/01/30

Actual recruitment start date

empty

Actual recruitment end date
empty
Trial completion date
empty

Scientific title
Comparison of the efficacy of intracoronary and intravenous Eptifibatide and intracoronary Retaplase on coronary blood flow in patients undergoing PPCI at Dr.Heshmat hospital during 2017-2018 (Randomized clinical trial study)

Public title
effect of eptifibatide and reteplase on primary angioplasty outcomes
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
ischemic tipic chest pain extending more than 30 min, STelevation more than 1 mm in at least 2 leads with the same name, all patients with STEMI candidate for primary PCI, myocardial infarction not extending more than 12 hours, having life expectancy not less than 6 months, consent for participation in the study, age 18 to 80 years, no evidence for prior myocardial infarction, not having contraindications for reteplase or eptifibatide, not having left bundle branch block, not using GPIIb/IIIa in recent two weeks.
Exclusion criteria:
rescue PCI after thrombolytic therapy, emergency CABG, cardiogenic shock, atrial fibrillation TIMI flow grade 3 in primary angiography(ie, having normal blood flow in coronary arteries) simultaneously presence in another intervention study
Age
From **18 years** old to **80 years** old
Gender
Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **160**
Randomization (investigator's opinion)
Randomized
Randomization description
random block
Blinding (investigator's opinion)
Not blinded
Blinding description
Placebo
Not used
Assignment
Other
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of Guilan University of Medical Sciences
Street address
the old building of the School of Public Health ,opposite the 17th Shahrivar Hospital, Shahid Siadati Ave,Namjoo Ave ,Rasht Town
City
Rasht
Province
Guilan
Postal code
4188794755
Approval date
2017-11-04, 1396/08/13
Ethics committee reference number
IR.GUMS.REC.1396.304

Health conditions studied

1

Description of health condition studied
Acute Myocardial Infarction
ICD-10 code
121
ICD-10 code description
Acute myocardial infarction

Primary outcomes

1

Description
coronary blood flow
Timepoint
before and after primary PCI
Method of measurement
based on angiographic scale TIMI blush grade

Secondary outcomes

1

Description
left ventricular diastolic dysfunction change
Timepoint
before and after angiography
Method of measurement
according to echocardiographic criteria

2

Description
ST resolution average
Timepoint

before and 90 minutes after PCI

Method of measurement

based on electrocardiogram

3

Description

average of EF changes

Timepoint

before and 3 to 4 days after angioplasty

Method of measurement

based on echocardiography

Intervention groups

1

Description

Intervention group: Group 1: Patients who have a stent after thrombosuction.

Category

Treatment - Drugs

2

Description

Intervention group:Group 2: Patients who receive 180 microgram per kilogram of intracoronary bolus eptifibatide by interval of 10 minutes and then stent is embeded.

Category

Treatment - Drugs

3

Description

Intervention group:Group 3: Patients who receive 6 mg of intra-coronary reptal after thrombosis, and then inserted into the stent.

Category

Treatment - Drugs

4

Description

Intervention group: Group 4:Patients after thrombosuction will receive 180 microgram per kilogram of intravenous bolus eptifibatide and then receive 2 microgram per kilogram per minute of infusion over 18 hours.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Heshmat heart hospital

Full name of responsible person

dr. mostafa zadkamali

Street address

15 khordad Ave, Next to Gilan Province Management and Planning Organization,Rasht Town

City

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Rasht University of Medical Sciences

Full name of responsible person

Dr.Shadman Nemati

Street address

the old building of the School of Public Health, opposite the 17th Shahrivar Hospital, Namjoo Ave, Shahid Siadati Ave, Rasht

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Grant name

Grant code / Reference number

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

Yes

Title of funding source

Rasht 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

Rasht University of Medical Sciences

Full name of responsible person

Mostafa Zadkamali
Position
resident of cardiology
Latest degree
Medical doctor
Other areas of specialty/work
Cardiology
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Person responsible for scientific inquiries

Contact
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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