Clinical Trial Protocol
Iranian Registry of Clinical Trials

05 Jul 2026

Comparison of the efficacy of intracoronary and intravenous Eptifibatide and intracoronary Retaplase in thrombus aspiration in patients undergoing Primary percutaneous coronary interventions (PPCI); Randomized clinical trial study)

Protocol summary

Study aim
Design
Settings and conduct
Participants/Inclusion and exclusion criteria
Intervention groups
Main outcome variables

General information

Reason for update
Acronym
IRCT registration information
IRCT registration number: **IRCT20170925036401N2**
Registration date: **2017-12-22, 1396/10/01**
Registration timing: **registered_while_recruiting**

Last update: **2017-12-22, 1396/10/01**
Update count: **0**
Registration date
2017-12-22, 1396/10/01

Registrant information
Name
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Name of organization / entity
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Iran (Islamic Republic of)
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Recruitment status
Recruitment complete
Funding source
Deputy of Research of Guilan University of Medical Sciences

Expected recruitment start date
2017-11-21, 1396/08/30
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 in thrombus aspiration in patients undergoing Primary percutaneous coronary interventions (PPCI); Randomized clinical trial study)

Public title
effect of eptifibatide and reteplase on primary angioplasty outcomes
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
Inclusion criteria: Ischemic typical chest pain extending more than 30 min; ST elevation 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:

Exclusion criteria: Rescue PCI after thrombolytic therapy; emergency CABG; AF; cardiogenic shock; TIMI flow grade 3 in primary angiography

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

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Deputy of Research of Guilan University of Medical Sciences

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

City
Rasht

Postal code

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
I21

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
All patients will receive Emergency PCI treatment. Patients will receive 300 mg of chewing aspirin and 600 mg of Clopidogrel maintenance dose prior to the procedure before transferring to the catheterism room. In the first group, the patients undergo thrombus suction after the wiring , and then the stent is embedded.In the second group, the patients undergo thrombus suction after wiring , then receive 180µg / kg intra coronary bolus eptifibatide. Intra coronary eptifibatide will be injected 2 times with 10 minutes interval and then the stent will be embedded.In the third group, patients undergo thrombus suction after wiring , and then 6 mg intracoronary reteplase is injected and the stent will be embedded.In the fourth group, the patients undergo thrombus suction after wiring , then receive 180µg / kg intravenous bolus eptifibatide during 18 hours in the ward.After the procedure angiography report for TIMI

blush grade and corrected TIMI frame count will be seen.All patients will be treated with a maintenance dose of 75 mg clopidogrel daily for one year and 300 mg of aspirin for 30 days and then 100 mg.

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

Rasht- 15 khordad street- Next to Gilan Province Management and Planning Organization

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Rsht

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Deputy of Research of Guilan University of Medical Sciences

Full name of responsible person

dr.shadman nemati

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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

Deputy of Research of Guilan 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

Guilan University of medical sciences

Full name of responsible person

Mostafa Zadkamali

Position

resident of cardiology

Other areas of specialty/work

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Other areas of specialty/work

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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