

Glucose-insulin-potassium infusion in patients treated with primary percutaneous coronary intervention for acute myocardial infarction

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|--|---|---|
| Submission date 17/05/2005 | Recruitment status No longer recruiting | <input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol |
| Registration date 20/05/2005 | Overall study status Completed | <input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results |
| Last Edited 15/02/2008 | Condition category Circulatory System | <input type="checkbox"/> Individual participant data |

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
99.028

Study information

Scientific Title

Acronym

Glucose-Insulin-Potassium Study (GIPS)

Study objectives

In this study we considered the question of whether adjunction of glucose-insulin-potassium (GIK) infusion to primary coronary transluminal angioplasty (PTCA) is effective in patients with an acute myocardial infarction (MI).

Ethics approval required

Old ethics approval format

Ethics approval(s)

Not provided at time of registration

Study design

Randomised controlled trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Not specified

Study type(s)

Not Specified

Participant information sheet

Health condition(s) or problem(s) studied

ST elevation myocardial infarction (mi)

Interventions

After admission, patients were randomly assigned to either glucose-insulin-potassium (GIK) infusion or no infusion. In patients randomized to GIK, a continuous infusion of 80 mmol potassium chloride in 500 ml 20% glucose with a rate of 3 ml/kg body weight/hour over an 8- to 12-hour period in a peripheral venous line was given, as soon as possible. A continuous infusion of short-acting insulin (50 U Actrapid) in 50 ml 0.9% sodiumchloride was started. Baseline insulin-infusion dose and hourly adjustments of the insulin dose were based on an algorithm to obtain blood-glucose levels between 7.0 and 11.0 mmol/l.

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

glucose-insulin-potassium

Primary outcome measure

30-day mortality

Secondary outcome measures

Recurrent infarction, repeat coronary angioplasty, and the composite incidence of death, recurrent infarction, or repeat coronary angioplasty.

Overall study start date

01/04/1998

Completion date

30/09/2001

Eligibility**Key inclusion criteria**

All consecutive patients with symptoms consistent with acute MI of >30 min duration, presenting within 24 hours after the onset of symptoms and with an ST-segment elevation of more than 1 mm (0.1 mV) in two or more contiguous leads on the electrocardiogram, or new onset left bundle branch block, were evaluated for inclusion in this single-center study. Patients presented at our center and patients referred for treatment of high-risk myocardial infarction (MI) from nine referring hospitals without angioplasty facilities were included.

Participant type(s)

Patient

Age group

Not Specified

Sex

Not Specified

Target number of participants

940

Key exclusion criteria

Patients were excluded when pre-treated with thrombolysis or when an illness associated with a marked restricted life expectancy was present.

Date of first enrolment

01/04/1998

Date of final enrolment

30/09/2001

Locations

Countries of recruitment

Netherlands

Study participating centre

Hanzeplein 1

Groningen

Netherlands

30.001

Sponsor information

Organisation

Netherlands Heart Foundation (Netherlands)

Sponsor details

Bordewijklaan 3

The Hague

Netherlands

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info@hartstichting.nl

Sponsor type

Charity

Website

<http://www.hartstichting.nl/go/>

ROR

<https://ror.org/05nxhgm70>

Funder(s)

Funder type

Charity

Funder Name

Netherlands Heart Foundation (99.028)

Results and Publications

Publication and dissemination plan
Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not provided at time of registration

Study outputs

| Output type | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|---------------------------------|---------|--------------|------------|----------------|-----------------|
| Results article | results | 02/06/2005 | | Yes | No |