A study on organ protection during bypass sugery by inflating a bloodpressure cuff on the arm.

No registrations found.

| Ethical review | Positive opinion |
|-----------------------|------------------|
| Status | Recruiting |
| Health condition type | - |
| Study type | Interventional |

Summary

ID

NL-OMON21859

Source NTR

Brief title RIPC-CABG

Health condition

CABG, remote preconditioning, cardioprotection

Sponsors and support

Primary sponsor: Academical Medical Centre, University of Amsterdam Source(s) of monetary or material Support: Academical Medical Centre, University of Amsterdam

Intervention

Outcome measures

Primary outcome

Differences in phosphorylation of PKC-e, p38MAKP, ERK and HSP27, before and after remote preconditioing, as compared to control.

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N/A

Study description

Background summary

The aim of this clinical study is to investigate whether remote ischemic preconditioning induces a phosphorylation of signalling pathway molecules, such as PKC-e, p38MAPK, ERK and HSP27, in human myocardium.

Study objective

Recent clinical data showed that remote ischemic preconditioning attenuates myocardial damage during cardiac surgery. Classic preconditioning is abolished in diabetic patients. We will investigate the molecular effects of remote ischemic preconditioning on the myocardium, in both diabetics and non-diabetics.

Study design

Two myocardial biopsies will be obtained, the first after sternotomy and the second 30 minutes later, but prior to cardiopulmonary bypass.

Intervention

Remote ischemic preconditioning: By inflating a automateic inflator cuff around the upper arm, we will induce forearm ischemia for 5 minutes, followed by 5 minutes of reperfusion. This cylce will be repeated 2 times.

In the control group the cuff will be placed on the upper arm, but no inflating will be done.

Contacts

Public

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Eligibility criteria

Inclusion criteria

- 1. CABG surgery with or without valve surgery;
- 2. Informed consent;
- 3. Age >18 years.

Exclusion criteria

- 1. Emergency surgery;
- 2. Heart failure;
- 3. Serious pulmonary disease;
- 4. Kidney failure.

Study design

Design

| Study type: | Interventional |
|---------------------|-------------------------------|
| Intervention model: | Parallel |
| Allocation: | Randomized controlled trial |
| Masking: | Double blinded (masking used) |

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Control:

N/A , unknown

Recruitment

| NL | |
|---------------------------|-------------|
| Recruitment status: | Recruiting |
| Start date (anticipated): | 28-07-2009 |
| Enrollment: | 56 |
| Type: | Anticipated |

Ethics review

| Positive opinion | |
|-------------------|------------------|
| Date: | 27-07-2009 |
| Application type: | First submission |

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register ID

NTR-new NL1821
NTR-old NTR1931
Other Medical Ethical Committee, AMC, University of Amsterdam : MEC 09/008
ISRCTN ISRCTN wordt niet meer aangevraagd.

Study results

Summary results

N/A