Exercise and physical activity patterns in patients with acute myocardial infarction

No registrations found.

Ethical review	Positive opinion
Status	Other
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON28975

Source
NTR

Health condition

Myocardial infarction, cardiovascular disease

Sponsors and support

Primary sponsor: Radboud university medical center
Source(s) of monetary or material Support: Dutch Heart Foundation

Intervention

Outcome measures

Primary outcome

Aim 1: infarct size

Aim 2: exercise and physical activity pattern

Secondary outcome

Aim 1:

- Recurrent myocardial infarction

- Readmission

- All-cause mortality

- Cardiovascular mortality

Aim 2:

- Quality of life

- Cardiac anxiety

- Personality type

Study description

Background summary

The primary goal of this study is to assess exercise and physical activity patterns in acute myocardial infarction. Our first aim is to assess whether infarct size is influenced by exercise patterns prior to and during onset of myocardial infarction. Our second aim is to get insight in possible changes in physical activity patterns after myocardial infarction over time and the influence on survival, recurrence rate and quality of life. Therefore we will conduct a prospective observational cohort study in 200 adult patients. The earlier mentioned endpoints will be assessed during follow up.

Study objective

- Aim 1: regular physical activity reduces the risk of cardiovascular events and is associated with better survival. Earlier studies show that exercise might also have a direct positive effect on myocardial tissue, probably due to ischaemic preconditioning. We hypothesize that exercise influences infarct size in patients suffering from myocardial infarction.

- Aim 2: little is known about the influence of physical activity patterns in the acute phase of myocardial infarction on the clinical course and survival. Additionally it is unknown whether physical activity patterns change after myocardial infarction and we do not know how this develops over time. This study provides insight in exercise and physical activity patterns after myocardial infarction and possible changes over time. Based on these findings we are able to optimize cardiac rehabilitation, which hopefully leads to better survival and quality of life, and a lower recurrence rate.

Study design

Baseline/admission (patient characteristics)

1-7 days post-myocardial infarction (interview + activity monitor)

7 days after discharge (activity monitor + questionnaire)

6 months after discharge (questionnaire)

Follow-up 1-3 years (mortality, readmissions, recurrent myocardial infarction)

Intervention

NA

Contacts

Public

Scientific

Eligibility criteria

Inclusion criteria

- Acute myocardial infarction according to 2018th ESC guideline Myocardial Infarction defined as:

* Acute myocardial injury with clinical evidence of acute myocardial ischaemia and with detection of a rise and/or fall of cTn values with at least one value above the 99th percentile URL and at least one of the following:

** symptoms of myocardial ischaemia

** new ischaemic ECG changes

** development of pathological Q waves

** imaging evidence of new loss of viable myocardium or new regional wall motion abnormality in a pattern consistent with an ischaemic aetiology

** identification of a coronary thrombus by angiography (not for type 2/3)
- coronary angiography during admission

- > 18 years

- written informed consent

Exclusion criteria

- wheelchair-bound patients

- language barrier

- unable to give informed consent

Study design

Design

Study type:	Observational non invasive
Intervention model:	Other
Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL

Recruitment status:	Other
Start date (anticipated):	01-01-2019
Enrollment:	200
Type:	Unknown

Ethics review

Positive opinion

Date:	29-11-2018

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	NL6777
NTR-old	NTR7646
Other	CCMO : 2018-45378

Study results