

DIAbetes-PREvention Trial

Published: 31-05-2011

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Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Other condition
Study type	Interventional

Summary

ID

NL-OMON38088

Source

ToetsingOnline

Brief title

DiaPreT

Condition

- Other condition
- Coronary artery disorders

Synonym

Heart problems, pre-diabetics

Health condition

pre-diabetici

Research involving

Human

Sponsors and support

Primary sponsor: Isala Klinieken

Source(s) of monetary or material Support: Isala klinieken (zorgvernieuwing)

Intervention

Keyword: Cardiac rehabilitation, Coronary artery disease (PCI or CABG in stable CAD or post STEMI and post non-STEMI), Pre-diabetes

Outcome measures

Primary outcome

The reduction in HbA1c at one year in patients with coronary artery disease

(PCI or CABG in stable CAD, or post STEMI and post non-STEMI patients)

Secondary outcome

- hsCRP
- LDL cholesterol
- MACE at one year FUP
- Exercise capacity

Study description

Background summary

Not only the incidence of diabetes is increasing, but also the incidence of pre-diabetes, defined as an impaired glucose tolerance test or impaired fasting glucose. A recent study showed that in China almost 140 million people have pre-diabetes, more than 15% of the total adult population. The incidence depends on the definition of pre-diabetes. Other investigators have defined pre-diabetes based on the HbA1c level. The rise in prevalence of pre-diabetes is associated with the increase in obesity and physical inactivity. Intense exercise has been shown to reduce the HbA1c level in patients with diabetes. In addition, oral anti-diabetic agents have been shown to be effective in patients with pre-diabetes.

Study objective

The primary objective of this randomized trial is to reduce the HbA1c levels by

10% through exercise training with or without oral anti-diabetic medication in patients with coronary artery disease (PCI or CABG in stable CAD, or post STEMI and post non-STEMI patients) that have pre-diabetes.

Study design

Patients who meet the inclusion criteria and none of the exclusion criteria will be randomized in a 1:1:1 fashion to an exercise training programme, an exercise training programme in combination with oral anti-diabetic medication (Metformine) during 1 year or regular treatment (6 weeks).

Intervention

Patients participating in this trial will be followed-up at 6 and 12 months after admission. Data regarding patient's history and current health status at follow-up will be collected and entered into the database by the investigator.

Study burden and risks

All subjects will require follow-up visits to our hospital at 6 and 12 month (\pm 30 days) after the index myocardial infarction. Subjects will undergo screening of cardiovascular complications or death, hospitalisation and concomitant medication.

The study medication for patients randomized to the treatment group: *Exercise training and Oral anti-diabetic medication*, consists oral Metformine.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years)

Elderly (65 years and older)

Inclusion criteria

Inclusion criteria ; • Patients admitted with coronary artery disease (PCI or CABG in stable CAD, or post STEMI and post non-STEMI) (inclusion within 2 month after admission) ; • Age ≥ 18 years ; • Elevated HbA1c levels (HbA1c $> 5.8\%$ or > 40 mmol/mol) on admission ; • Access to a computer with internet connection; • Written informed consent

Exclusion criteria

Exclusion criteria ; • Known diabetics, with or without anti-diabetic medication ; • Contraindications for Metformine use as stated in the medication registration; • Life Expectancy < 1 yr ; • Physical limitations/restrictions for participation in exercise programme or exercise testing ; • Fasting plasma glucose ≥ 7.0 mmol/l or HbA1c ≥ 53

Study design

Design

Study phase:	4
Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Active

Primary purpose: Treatment

Recruitment

NL
Recruitment status: Recruitment stopped
Start date (anticipated): 11-07-2012
Enrollment: 78
Type: Actual

Medical products/devices used

Product type: Medicine
Brand name: Metformine hydrochloride
Generic name: Metformine hydrochloride
Registration: Yes - NL intended use

Ethics review

Approved WMO
Date: 31-05-2011
Application type: First submission
Review commission: METC Isala Klinieken (Zwolle)

Approved WMO
Date: 12-10-2011
Application type: First submission
Review commission: METC Isala Klinieken (Zwolle)

Approved WMO
Date: 08-05-2012
Application type: Amendment
Review commission: METC Isala Klinieken (Zwolle)

Approved WMO
Date: 10-05-2012
Application type: Amendment
Review commission: METC Isala Klinieken (Zwolle)

Approved WMO
Date: 20-12-2012

Application type:	Amendment
Review commission:	METC Isala Klinieken (Zwolle)
Approved WMO	
Date:	11-02-2013
Application type:	Amendment
Review commission:	METC Isala Klinieken (Zwolle)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

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

ID: 21355
Source: NTR
Title:

In other registers

Register	ID
EudraCT	EUCTR2011-002469-39-NL
CCMO	NL37115.075.11
OMON	NL-OMON21355