The effect of dopamine depletion on endogenous glucose production in healthy subjects.

No registrations found.

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

Summary

ID

NL-OMON24057

Source
Nationaal Trial Register

Brief title
CLAMPT study

Health condition

Diabetes Mellitus type II (DMII)
insulin resistance/ insuline resistentie

Sponsors and support

Primary sponsor: Academic Medical Center (AMC), Department of Endocrinology and Metabolism.
Source(s) of monetary or material Support: Academic Medical Center (AMC), Department of Endocrinology and Metabolism.

Intervention

Outcome measures

Primary outcome

Endogenous glucose production.

Secondary outcome

1. Peripheral insulin sensitivity;

2. Lympathetic activity;

3. Glucoregulatory hormones.

Study description

Background summary

It has been hypothesized that dopamine may be involved in the modulation of glucose metabolism. This hypothesis is partly based on the observation of the relationship between schizophrenia and diabetes and the finding that lean drug-naive schizophrenic patients display hepatic insulin resistance.

We will investigate glucose metabolism in healthy subjects after dopamine depletion with AMPT and placebo, using a hyperinsulinemic euglycemic clamp with stable isotopes.

Study objective

Hepatic insulin sensitivity increase after dopamine depletion, with a-methylparatyrosine (AMPT).

Study design

We will draw bloodsamples in the basal state, after de first and after the second step of the clamp.

Intervention

Each subject will be studied twice. Once after dopamine depletion (with AMPT) and once after placebo. We will perform a 2-step hyperinsulinemic euglycemic clamp, using stable isotopes.

Contacts

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Eligibility criteria

Inclusion criteria

1. Healthy men;

2. Age: 18-35 years;

3. BMI: 20-25 kg/m2.

Exclusion criteria

1. DM type I and II or any other chronic disease;

2. Renal insufficiency or elevated liver enzymes;

3. Family history of DMII;

4. Primary dyslipidemia;

5. Use of any drugs and history of drug abuse;

6. Alcohol consumption >3/day;

7. Performance of vigorous exercise;

8. History of psychiatric disorders.

Study design

Design

Study type:	Interventional
Intervention model:	Crossover
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Placebo

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	10-01-2009
Enrollment:	10
Type:	Anticipated

Ethics review

Positive opinion

Date:	09-09-2009
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	NL1885
NTR-old	NTR1999
Other	METC Academic medical center : MEC 08/347
ISRCTN	ISRCTN wordt niet meer aangevraagd.

Study results

Summary results
N/A