# Metabolic effects of deep brain stimulation in patients with obsessive compulsive disorder.

No registrations found.

**Ethical review** Positive opinion

**Status** Recruiting

Health condition type -

**Study type** Interventional

## **Summary**

#### ID

NL-OMON26928

**Source** 

NTR

**Brief title** 

**DBS-OCD** 

#### **Health condition**

- -Diabetes Mellitus type II (DMII)
- -obsessive compulsive disorder (OCD)/obsessief compulsieve stoornis
- insulin resistance/insuline resistentie

## **Sponsors and support**

**Primary sponsor:** Acaemic Medical Center (AMC), department of Endocrinology and Metabolism and Department of Psychiatry.

**Source(s) of monetary or material Support:** Acaemic Medical Center (AMC), department of Endocrinology and Metabolism and Department of Psychiatry.

#### Intervention

#### **Outcome measures**

#### **Primary outcome**

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- 1. HPS axis activity;
- 2. Endogenous glucose production.

#### **Secondary outcome**

- 1. Lipid metabolism;
- 2. Resting energy expenditure.

# **Study description**

#### **Background summary**

Central regulation of glucose- and lipid metabolism is an area of research in the field of obesity and insulin. Especially the nucleus accumbens has become an area of interest, because of its involvement in food intake, satiety and energy expenditure. It has been shown that dopamine metabolism in the mesoaccumbens system may be altered in obesity with contradictory rsults showing either reduced or increased dopamine signaling. The procedure of DBS in de nucleus accumbens provides an exceptional opportunity to gain insight in the role of the nucleus accumbens in these metabolic processes.

We will perform a hyperinsulinemic euglycemic clamp with stable isotopes in the off and on situation, to measure glucose- and lipid metabolism and use plasma ACTH and urine cortisol levels to measure HPA axis activity.

## **Study objective**

Deep brain stimulation influences the HPA axis and glucose- and lipid metabolism in patients with obsessive compulsive disorder (OCD).

#### Study design

N/A

#### Intervention

Hyperinsulinemic euglycemic clamp with stable isotopes.

## **Contacts**

#### **Public**

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# **Eligibility criteria**

## Inclusion criteria

Patients with OCD with deep brain stimulation in the nucleus accumbens.

#### **Exclusion criteria**

- 1. Use of psychotropic drugs;
- 2. Use of drugs or abuse;
- 3. Pregnancy;
- 4. Use of medication known to interfere with glucose or lipid metabolism;
- 5. DMII or impaired fasting glucose;
- 6. Primary lipid disorder;
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- 7. Performance of vigorous exercise;
- 8. Renal insufficiency or elevated liver enzymes.

# Study design

## **Design**

Study type: Interventional

Intervention model: Crossover

Allocation: Randomized controlled trial

Masking: Double blinded (masking used)

Control: Active

## Recruitment

NL

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

Enrollment: 16

Type: Anticipated

## **Ethics review**

Positive opinion

Date: 10-09-2009

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 NL1886 NTR-old NTR2000

Other METC Academic medical center: MEC 08/276

ISRCTN wordt niet meer aangevraagd.

# **Study results**

## **Summary results**

N/A