Evaluation of measures of executive functions and sensitivity to reward as endophenotypes for childhood obesity

Published: 28-01-2009
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In this study, we want to investigate whether obese children perform differently than normal weight children (data already generated) on tasks of sensitivity to reward and executive functioning.

Ethical review	Approved WMO
Status	Completed
Health condition type	Glucose metabolism disorders (incl diabetes mellitus)
Study type	Observational invasive

Summary

ID

NL-OMON39473

Source
ToetsingOnline

Brief title
executive functions and sensitivity to reward in childhood obesity

Condition

- Glucose metabolism disorders (incl diabetes mellitus)
- Appetite and general nutritional disorders

Synonym
overweight and diabetes mellitus type 2

Research involving
Human

Sponsors and support

Primary sponsor: Vrije Universiteit Medisch Centrum
Source(s) of monetary or material Support: SKWOSZ

Intervention

Keyword: endophenotype, executive functions, obesity, sensitivity to reward

Outcome measures

Primary outcome

- scores of the excecutive function test and sensitvity to reward tests

- questionnaire scores of the BIS/BAS and CBSL filled in by the parents

- length and weigth of the child

- genetic testing (optional)

Secondary outcome

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Study description

Background summary

Type 2 diabetes (T2D) is a multifactorial disorder. The leading risk factor for T2D is obesity. T2D and obesity have a strong genetic component and their susceptibility genes are partially the same. Studies of the genetics of obesity and T2D are hampered by the heterogeneity of the phenotypes. In addition, this heterogeneity complicates the prevention and treatment of the diseases. This problem may be solved by creating subgroups of patients based on endophenotypes which are more proximal to the biological aetiology of the disease. Based on the overlap in the brain circuitry involved in food intake and addictive behaviour, we propose to study the association of obesity and overweight with a range of addiction-related candidate endophenotypes.

Study objective

In this study, we want to investigate whether obese children perform differently than normal weight children (data already generated) on tasks of sensitivity to reward and executive functioning.

Study design

We will test the performance of 45 obese children on an extensive and validated

battery of executive functioning and sensitivity to reward tasks. The children, aged 6-12 years, will recruited from the obesity outpatient clinic of the Slotervaart hospital. This study will enable us to examine the relationship of both overweight and obesity with a broad range of candidate endophenotypes.

Study burden and risks

The main burden is time and the optional blood sample for genetic testing. This blood sample will be combined with the oral glucose tolerance test (oGTT), which is done as standard of care.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adolescents (12-15 years)
Adolescents (16-17 years)
Children (2-11 years)

Inclusion criteria

- age 6-12 years old
- obesity, as defined by a Z-BMI >2.3
- Caucasian

Exclusion criteria

children with a physical illness

Study design

Design

Study type: Observational invasive

Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Basic science

Recruitment

NL

Recruitment status:	Completed
Start date (anticipated):	01-02-2009
Enrollment:	45
Type:	Actual

Ethics review

Approved WMO Date:	28-01-2009
Application type:	First submission
Review commission:	METC Amsterdam UMC
Approved WMO Date:	22-10-2012
Application type:	Amendment

Review commission:	METC Amsterdam UMC
Approved WMO Date:	22-07-2013
Application type:	Amendment
Review commission:	METC Amsterdam UMC

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
CCMO	NL24617.029.08