The genetic basis of gender dysphoria

Published: 08-01-2016
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The purpose of the study is to identify genetic changes that cause gender dysphoria.

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Sexual dysfunctions, disturbances and gender identity disorders
Study type	Observational invasive

Summary

ID

NL-OMON42698

Source
ToetsingOnline

Brief title
The genetic basis of gender dysphoria

Condition

- Sexual dysfunctions, disturbances and gender identity disorders

Synonym
Gender dysphoria, transsexualism

Research involving
Human

Sponsors and support

Primary sponsor: Leids Universitair Medisch Centrum
Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: Adolescent, Child, Gender dysphoria, Genetic

Outcome measures

Primary outcome

DNA analysis

Secondary outcome

Not applicable

Study description

Background summary

Gender dysphoria refers to an incongruence between the sex assigned at birth and the experienced gender identity. The etiology of gender dysphoria is still largely unknown. Results of studies from a variety of biomedical disciplines* endocrine, genetic, and neuroanatomic*support the concept that gender identity likely reflects a complex interplay of biologic, environmental, and cultural factors.
Several studies have suggested heritability of gender dysphoria. In particular, a study by Heylens et al. demonstrated a 39.1% concordance rate for gender identity disorder (based on DSM-IV criteria) in 23 monozygotic twin pairs but no concordance in 21 same-sex dizygotic or 7 opposite-sex twin pairs. A specific genetic cause of gender dysphoria has not been identified. Genes encoding hormone receptors or enzymes involved in steroidogenesis seemed good candidate genes and have been investigated but studies have reported conflicting results.
Most of the genetic studies have been performed in adults with gender dysphoria, who form a heterogeneous group. The etiology of gender dysphoria may not be the same for all these individuals; for some social or sexual influences may play a significant role. Adolescents with early-onset gender dysphoria are a more homogeneous group and genetics may be a more important determinant of gender dysphoria in this group.

Study objective

The purpose of the study is to identify genetic changes that cause gender dysphoria.

Study design

Observational study

Study burden and risks

Burden: one venapuncture. In patients the blood for DNA extraction will be drawn at a moment when the patient needs to have a blood sample taken for monitoring of treatment as part of the routine care so that no extra venapuncture has to be done for the study.
Risk: none
Benefit: none

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

Adolescents with early-onset gender dysphoria who are starting or have started treatment

and their parents

Exclusion criteria

None

Study design

Design

Study type: Observational invasive

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

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	21-01-2016
Enrollment:	300
Type:	Actual

Ethics review

Approved WMO

Date:	08-01-2016
Application type:	First submission
Review commission:	METC Leiden-Den Haag-Delft (Leiden) metc-ldd@lumc.nl

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	NL53632.058.15

Study results

Date completed:	05-07-2019
Actual enrolment:	19