# Instrumental assessment of movement disorders in antipsychotic naive patients with autism and healthy controls

Published: 08-02-2010 Last updated: 04-05-2024

Examine whether there are differences in both instrumental as well as clinical assessment of movement disorders among drug naive patients with autism compared with matched healthy controls.

**Ethical review** Approved WMO

**Status** Recruitment stopped

**Health condition type** Developmental disorders NEC **Study type** Observational non invasive

## **Summary**

### ID

NL-OMON35557

#### Source

**ToetsingOnline** 

#### **Brief title**

Movement disorders in autism

## **Condition**

Developmental disorders NEC

## **Synonym**

Autism

## Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Universitair Medisch Centrum Utrecht

Source(s) of monetary or material Support: Ministerie van OC&W

## Intervention

**Keyword:** antipsychotic naive, autism, Movement disorders

## **Outcome measures**

### **Primary outcome**

Difference in prevalences of instrumental assessment of movement disorders among drug naive patients with autism compared with matched healthy controls

## **Secondary outcome**

Difference in prevalences of clinical assessment of movement disorders among drug naive patients with autism compared with matched healthy controls

# **Study description**

## **Background summary**

There is evidence that in autism repetitive and stereotyped behavior is related to an increase of the basal ganglia, particularly the Nucleus Caudatus. An interesting additional possibility is that other (mild) movement disorders (such as dyskinesia and parkinsonism ism) are also common in autism and possibly associated with the found structural abnormalities.

In addition, research shows that patients with autism are very sensitive to the development of movement disorders (dyskinesia and parkinsonism) after the use of antipsychotic drug, which is given in autism for the reason to reduce repetitive behavior.

Most likely these movements cannot only be attributed to antipsychotic drug use, but may form an integral part of the autistic syndrome and could be regarded as an endophenotype of the disease.

It is therefore essential that patients with autism who have never used antipsychotic medication be screened for the presence of these movement disorders (dyskinesia and parkinsonism). As these movement disorders are most likely to be mild, instrumental assessment must be used as it has proven to be more objective, reliable and sensitive than traditional rating scales.

Perhaps that in the future it can be better predicted which patients with

autism are vulnerable to the development of movement disorders after antipsychotic drug use.

## Study objective

Examine whether there are differences in both instrumental as well as clinical assessment of movement disorders among drug naive patients with autism compared with matched healthy controls.

## Study design

Case-control study

## Study burden and risks

The assessment of the movement disorders takes about 30 minutes per person and can be held in a single research session. This research takes place in the department of Child- and adolescent psychiatry of the University Medical Centre Utrecht, the Netherlands. It includes non-invasive registration of movements by means of a computer task which is easy to handle and not burdensome and a non-invasive examination of the movements using clinical observation scales. There is no risk to the extent known, even for minors. For this study children and adolescents (6- 22 years) are included, because these groups are less likely to ever have used antipsychotics medication. Therefore the presence of possible movement disorders in antipsychotic patients with autism cannot be attributed to medication, but is related to the disorder itself and could be considered as a possible phenotype of autism. Participation in the study provides no direct benefit to the subjects itself. However, perhaps that in the future it can be better predicted which patients with autism are vulnerable to the development of movement disorders after antipsychotic drug use.

## **Contacts**

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## **Trial sites**

## **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

## Age

Adolescents (12-15 years)
Adolescents (16-17 years)
Adults (18-64 years)
Children (2-11 years)
Elderly (65 years and older)

## Inclusion criteria

- 1. Patients with autism
- -High functioning medication naïve patients diagnosed autism spectrum disorders according to DSM-IV codes 299.00 or 299.80
- -Age 12-22 year: addendum 6-22;2. Healthy controls

Healthy controls without psychiatric disorders according to DSM-IV code V71.09

-Age 12-22 year; addendum 6-22

## **Exclusion criteria**

- -Use of antipsychotic medication, antidepressants or benzodiazepines, now or in the past.
- -A medical, psychiatric (other than autism spectrum disorder) and / or neurological disorder (with the exception of epilepsy) that can produces movement disorders.
- -DSM-criteria for substance abuse, other than nicotine of caffeine.
- -IQ < 85; addendum IQ < 70
- -Participation of another medical study less than one month earlier
- -Treatment with medication during the past 30 days that was not yet approved at the beginning of the study
- -Severe life-threatening disorders, if which the patients is most likley to die of within one year.

# Study design

## **Design**

Study type: Observational non invasive

Intervention model: Other

Allocation: Non-randomized controlled trial

Masking: Open (masking not used)

Control: Active

Primary purpose: Basic science

## Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 02-08-2010

Enrollment: 100

Type: Actual

# **Ethics review**

Approved WMO

Date: 08-02-2010

Application type: First submission

Review commission: METC Universitair Medisch Centrum Utrecht (Utrecht)

Approved WMO

Date: 20-12-2010

Application type: Amendment

Review commission: METC Universitair Medisch Centrum Utrecht (Utrecht)

# **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 NL29320.041.09