The relation between brain and neurocognitive functions in ADHD

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1) To investigate the relative contribution of different neurocognitive dysfunctions toADHD.2) To identify potential baseline EEG/MRI markers of different neurocognitive functions in ADHD children and healthy controls.

Ethical review	Not approved
Status	Will not start
Health condition type	Cognitive and attention disorders and disturbances
Study type	Observational invasive

Summary

ID

NL-OMON32505

Source
ToetsingOnline

Brief title
Brain & neuorcognitive functions in ADHD

Condition

- Cognitive and attention disorders and disturbances

Synonym
Attention-deficit/hyperactivity disorder (ADHD)

Research involving
Human

Sponsors and support

Primary sponsor: Universitair Medisch Centrum Sint Radboud
Source(s) of monetary or material Support: Smartmix fonds

Intervention

Keyword: Attention-deficit/hyperactivity disorder, Electroencephalogram (EEG), Magnetic Resonance Imaging (MRI), Neurocognitive tasks

Outcome measures

Primary outcome

The difference between children with ADHD and matched healthy controls on the

relationship between brain and cognition.

Secondary outcome

not applicable

Study description

Background summary

Decades of research have established well-replicated findings of several neurocognitive deficits in attention-deficit/hyperactivity disorder (ADHD), leading to well-developed neurocognitive models of ADHD. Moreover, neuroimaging and electrophysiological studies have revealed consistent evidence for abnormal brain structures as well as deviant brain activity in ADHD. However, only recently, research is directed to the integration of different neurocognitive models within one study in order to elucidate their relative contributions to ADHD. Furthermore, studies that directly link brain abnormalities to neurocognitive dysfunctions are lacking. This case-control study focuses on neurocognitive dysfunctions and EEG/MRI markers in ADHD.

Study objective

1) To investigate the relative contribution of different neurocognitive dysfunctions toADHD.
2) To identify potential baseline EEG/MRI markers of different neurocognitive functions in ADHD children and healthy controls.

Study design

Patient control study

Study burden and risks

Risks or side-effects are not expected. The burden for the subjects consists of a screening session (30 min), intake (60 min) and two experimental sessions (70 and 125 min). The benefit involves extended knowledge about ADHD. Because ADHD is primarily a psychiatric disorder of childhood, children will form the target population of the present study.

Contacts

Public
Universitair Medisch Centrum Sint Radboud

Reinier Postlaan 10
6500 HB Nijmegen
Nederland
Scientific
Universitair Medisch Centrum Sint Radboud

Reinier Postlaan 10
6500 HB Nijmegen
Nederland

Trial sites

Listed location countries

Netherlands

Eligibility criteria

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

Inclusion criteria

Age between 8 and 15 years

IQ >= 80;An additional criterium for the ADHD group:
Psychopharmaca-naive, or using psychostimulants/atomoxetine

Exclusion criteria

Currently intensive (i.e. weekly) individual or group psychotherapy
Regular use of medication other than psychopharmaca
Diagnosis of one or more of the following comorbid psychiatric disorders: Major depression, Bipolar disorder, Psychotic disorder, Chronically motor tic disorder or Gilles de la Tourette, Conduct disorder, Autism spectrum disorders, Eating disorders.
Neurological disorders (e.g. epilepsy) currently or in the past
Cardiovascular disease currently or in the past
Participation in another clinical trial simultaneously
Metal parts in the body;An additional exclusion criterium for the control sample is diagnosis of ADHD

Study design

Design

Study type:	Observational invasive
Intervention model:	Other
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Control:	Active
Primary purpose:	Diagnostic

Recruitment

NL

Recruitment status:	Will not start
Enrollment:	80
Type:	Anticipated

Ethics review

Not approved

Date:	27-01-2009
Application type:	First submission
Review commission:	CCMO: Centrale Commissie Mensgebonden Onderzoek (Den Haag)

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	NL24151.091.08