Influence of callous-unemotional traits, neuropsychological characteristics and neurobiological markers on treatment-outcome in adolescents with disruptive behavior disorders in a closed treatmentsetting

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Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Personality disorders and disturbances in behaviour
Study type	Observational non invasive

Summary

ID

NL-OMON38207

Source
ToetsingOnline

Brief title
CU-traits, neuropsychology, neurobiology and results of DBD treatment

Condition

- Personality disorders and disturbances in behaviour

Synonym
conduct disorder, psychopathy

Research involving

Human

Sponsors and support

Primary sponsor: Vrije Universiteit Medisch Centrum
Source(s) of monetary or material Support: Instelling zelf betaald het onderzoek

Intervention

Keyword: Agression Replacement Training, DBD, HPA, psychopathy

Outcome measures

Primary outcome

Change in conduct problems

Change in aggressive behavior

Change in CU-traits

Change in HPA-axis (re)activity

Change in ANS activity

Neuropsychological measurements

Secondary outcome

Not applicable

Study description

Background summary

There are various treatment programs for youth with severe conduct problems, with the most intensive programs taking place in a closed treatment setting. Involuntary placement in such a setting is seen as the last resort.
Sadly placement in closed setting does not always lead to a gain in functioning. A considerable part of the treated youth continue having conduct problems and show a great risk to develop a criminal career and psychosocial dysfunctioning. Therefore there is an urgent need to find cues to develop and improve treatment modalities.
There is some evidence that youth exhibiting conduct problems in combination

with specified psychopathic characteristics, called callous-unemotional traits (CU-traits) with or without decreased (re)activity of the Hypothalamus-Pituitary-Adrenal axis (HPA-axis) and the autonomic nervous system (ANS) do respond less well to punishment and rewards.
Because most common treatment programs are primarily based on these principals, the assumption can be made that within the total group of youth with conduct problems the subgroup with CU-traits with or without decreased HPA/ANS (re)activity will profit less from these intensive treatment programs.
Furthermore, there are recent indication that specific neuropsychological processes can be of significance with treatment response in delinquent youth (De Kogel 2008; Fishbein 2009). This is in line with Moffit's theory 'Developmental dual taxanomy of antisocial behavior' (Moffit 1993), in which impaired neuropsychological functioning is characteristic for persistant antisocial behavior. Insight into the neuropsychological characteristics of DBD youth can contribute to more effective interventions. Also, it is plausible that neuropsychological charachteristics have predictive value for treatment succes.

Study objective

The study proposes to gain more knowledge in the influence of neuropsychological characteristics, CU-traits and HPA/ANS (re)activity on treatment outcome after standardized treatment in a closed treatment setting as well as the changeability of the last two of these factors during treatment. With this knowledge, treatment programs can be better tuned to specific characteristics of youngsters and will yield new insights for future research on the development of more effective interventions in this difficultly treatable youth.

Study design

This observational study will include all youth who are admitted to a civil closed treatment setting during a two year period. This will lead to approximately 200 youngsters. During their stay several characteristics will be followed.
CU-traits, conduct problems and possible changes in these factors are measured regularly for treatment evaluation and are collected in a standardized way.
In addition, for this study HPA/ANS (re)activity is measure directly after admission, before and after a regular treatment(Agression Replacement Training [ART]) and before discharge by collecting the Cortisol Awakenings Respons (CAR) and the heart rate.
the expansion and extension will build up to 5 years research, in which a total of 200 adolescents will participate, off which a 100 will participate in the heartrate and neuropsychological measurments. The neuropsychological measurements will take place just before the start of the ART.

Study burden and risks

Youth participating in the study will all get the standard treatment, just like those who do not participate. In addition to the standard measurements, participants will undergo a CAR and ANS (re)activity measurement for 4 times. For the CAR a participant is asked to chew for three times an a cotton swab within the first hour after awakening. During this first hour the participant is not allowed to eat, drink or smoke, after the last measurement the participant will continue with his daily activities.
For ANS (re)activity teh adolescent will be measured 3 times, through a set of electroides they can apply to the body themselves. The neuropsychological characteristics will be measured through a computer and will take up around 85 minutes. This will be a moment suitable to the adolescent. Considering the nature of the measurements, the burden for the participants is neglectably small. There are no risks connected with this study.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adolescents (12-15 years)
Adolescents (16-17 years)

Inclusion criteria

presence of a disruptive behavior disorder

Exclusion criteria

presence of psychotic episode
use of steroid medication
Non-dutch speaking
IQ under 75

Study design

Design

Study type: Observational non invasive

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

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	01-06-2010
Enrollment:	300
Type:	Actual

Ethics review

Approved WMO

Date:	24-02-2010
Application type:	First submission
Review commission:	METC Amsterdam UMC

Approved WMO Date:	20-09-2012
Application type:	Amendment
Review commission:	METC Amsterdam UMC
Approved WMO Date:	28-02-2013
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	NL28476.029.09