Neurobiological and behavioural aspects of social aggression in healthy men and women

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Ethical review	Not approved
Status	Will not start
Health condition type	Personality disorders and disturbances in behaviour
Study type	Observational invasive

Summary

ID

NL-OMON33163

Source
ToetsingOnline

Brief title
Neurobiology of social aggression

Condition

- Personality disorders and disturbances in behaviour

Synonym
Social aggression; antisocial behaviour

Research involving
Human

Sponsors and support

Primary sponsor: Universiteit Utrecht
Source(s) of monetary or material Support: VIDI beurs;toegekend aan dr. D.J.L.G. Schutter

Intervention

Keyword: Aggression, Brain communication, Hormones, Transcranial Magnetic Stimulation

Outcome measures

Primary outcome

Main study parameters in the proposed study are the inter-individual differences in relations between cortico-cortical functional connectivity, behavioural measures and personality characteristics. In two of the four proposed substudies the collected endocrine measures will also be related to cortico-cortical functional connectivity, behavioural measures and personality characteristics.

Secondary outcome

Subject's demographics, motorthreshold values (part of the transcranial magnetic stimulation procedure).

Study description

Background summary

Social aggression poses a major threat for individuals and society. The investigation of the psychobiological underpinnings of this destructive phenomenon is thus of critical importance. Recent evidence suggests that hormonal imbalances in steroid hormones
and aberrant forms of cortical brain communication are associated with social aggression.

Study objective

The primary objective of the proposed study is to gain insight in the underlying neural mechanisms by which frontal cortical activation patterns are established, and its implications for human aggressive behaviour. The proposed approach aims to integrate hormonal and physiological properties of cortico-cortcal and cortico-subcortical brain communication, and relate these

properties to human aggressive behaviour.

Study design

As the proposed study aims to compare inter individual differences in relations in hormonal, physiological and behavioural properties, this observational study employs a between subjects design.

Study burden and risks

In order to alleviate experimental demands posed upon the participants, all participants will perform not all tasks. Therefore, candidate participants will be asked to perform only a subset of tasks in each of the proposed sub experiments. The study will consist of four sub experiments, each of which will last approximately one and a half hour. In 2 of the four proposed sub experiments, an additional time investment of the participant will be asked because of the collection of saliva directly after awakening, and the collection of a saliva sample directly preceding the experimental session. The experimental sessions will consist of the administration of two questionnaires, a Transcranial Magnetic Stimulation session and a behavioural task. The parameters used in the Transcranial Magnetic Stimulation session are well within internationally accepted stimulation parameters, and bear a negligible health risk.

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

Good health
Right-handedness
Non-smoking
Aged between 18-40 years
Normal or corrected-to-normal vision
Signed informed consent

Exclusion criteria

Metal in cranium
15 alcoholic beverages per week
Use of psychotropic drugs, including cannabis, XTC, amphetamines and cocaine
Epilepsy or family history of epilepsy (1st degree relatives)
History of closed-head injury
History of neurological or psychiatric disorders and/or treatment
Current neurological or psychiatric treatment
History of endocrinological disorders and/or treatment
Current endocrinological treatment
Medication: Benzodiazepines, antidepressants & neuroleptica
Cardiac pacemaker
Implanted medication pump
Intra-cardiac lines
Habitual smoking
Pregnancy

Study design

Design

Study type: Observational invasive

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

Recruitment

NL

Recruitment status:	Will not start
Enrollment:	120
Type:	Anticipated

Ethics review

Not approved

Date:	31-03-2009
Application type:	First submission
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	NL27425.041.09