Psychobiological effect of oxytocin in human social-emotional behaviour

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To scrutinize the role of OT in human social-emotional behaviour and gain insight in the neurobiological mechanism by which the peptide exert their effects.

Ethical review	Not approved
Status	Will not start
Health condition type	Other condition
Study type	Interventional

Summary

ID

NL-OMON31542

Source
ToetsingOnline

Brief title
OT in social-emotional behaviour

Condition

- Other condition

Synonym
nvt

Health condition

geen, fundamenteel onderzoek

Research involving
Human

Sponsors and support

Primary sponsor: Universiteit Utrecht
Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: fMRI, oxytocin, peptides, social behaviour

Outcome measures

Primary outcome

Study parameters of the behavioural data will include reaction times, eye tracking patterns, entrusted monetary units, EMG measured facial muscle activation, ECG skin conductance, reported answers to moral judgments or emotional categories. For the fMRI adaptations differences in bold response between OT and AVP administration and placebo will be measured.

Secondary outcome

nvt

Study description

Background summary

Extensive animal literature point to a pivotal role of Oxytocin and Vasopressin in social-emotional behaviour in evolutionary distant species. This leads to the prediction that these peptides which mechanisms are at least partly conserved in humans still exerts its functions in human social-emotional behaviour. The question to what amount these mechanisms play a role in social-emotional processing is paramount, and with a series of behavioural studies followed by an fMRI experiment, we attempt to scrutinize the potential effects of OT and AVP and study their underlying neuro-biological mechanisms.

Study objective

To scrutinize the role of OT in human social-emotional behaviour and gain insight in the neurobiological mechanism by which the peptide exert their effects.

Study design

Different behavioural computer tasks will be used in a double blind placebo

controlled intervention study in which OT will be administered. Following these behaviour studies an fMRI experiment will be performed with equal OT administration.

Intervention

Oxytocin nasal spray administration

Study burden and risks

Administration of the peptide OT is not known to lead to any adverse side-effects as shown in previous studies (e.g. Kosfeld et al., 2005), so it is unlikely that our participants will experience adverse phenomenological alterations.
Fmri is a non-invasive technique, so there is no need for special preparation for the subject. There are no known risks associated with fMRI acquisition. If pathology is noticed, and medical treatment is indicated, the subject will be notified.
All other measurement techniques used are non-invasive and thoroughly tested at the laboratory of Experimental Psychology and do not lead to significant discomfort in participating subjects.
The benefit of the present experiment is increased understanding of underlying neurobiological mechanisms of human social emotional processing. Although no immediate benefits are expected from this increased understanding, the search for better treatment for the great share of psychiatric diseases with pathology in social emotional processing (e.g. autism, depression, schizophrenia) might ultimately gain from these insights.

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

healthy, right-handed

Exclusion criteria

unremovable metal in or around body, history of health problems

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	Placebo
Primary purpose:	Other

Recruitment

NL
Recruitment status: Will not start

Enrollment:	52
Type:	Anticipated

Ethics review

Not approved

Date:	04-03-2008
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	NL20563.041.08