Neural mechanisms of oxytocin

No registrations found.

Ethical review	Not applicable
Status	Pending
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON25752

Source
NTR

Brief title
Neural mechanisms of OT

Health condition

fundamental study in underlying mechanisms of social behaviour

Sponsors and support

Primary sponsor: J. van Honk
Heidelberglaan 2
3584 CS Utrecht
j.vanhonk@uu.nl
Source(s) of monetary or material Support: high potential grant Utrecht University

Intervention

Outcome measures

Primary outcome

Differences in blood oxygen level dependent (BOLD) response between OT administration and placebo will be measured.

Secondary outcome

2 questionaires will be obtained

Study description

Background summary

To gain insight in the neurobiological mechanisms behind oxytocin effects on human social-emotional behaviour, the following study will investigate the neural mechanisms of human sociality combined with oxytocin administration. A within subjects, double-blind counterbalanced placebo controlled design will be used. One group of subjects will participate in both experimental and placebo condition. Procedures on both days are identical and consist of an explanation of the tasks to be performed, the administration (placebo or OT nasal spray) followed by an functional Megnatic Resonance Imaging scan during which 3 tasks investigating the neural mechanisms of social are to be performed and an anatomical scan is made. Contrasting task related Blood oxygen level dependent activation within the group between placebo and OT can show specific activation related to OT administration.

Study objective

Oxytocin has effect on neural areas involved in human social emotional functioning

Study design

2 timepoints, 1 for placebo, 1 for experimental condition

Intervention

Participants will self-administer 24 IU OT nasal spray. This nasal spray contains a synthetic version of OT which is identical to the human pituitary version of OT under the registered name Syntocinon. The placebo condition will consist of the same nasal administration without the active ingredient OT. Nasal spray administration is an effective way of delivering OT in the central nervous system via the nasal mucous membrane, without substantial side effects (Born et al., 2002; Kosfeld et al., 2005).

Contacts

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Eligibility criteria

Inclusion criteria

1. Good health

2. Age between 18 and 30

3. Normal or corrected to normal vision

4. Right-handedness

Exclusion criteria

1. Oversensitivity for OT or carrier

2. Use of psychotropic medication, or of recreational drugs over a period of two weeks prior to each experiment, and no use of alcohol within the last 24 hours before each measurement.

3. Habitual smoking

4. History of psychiatric treatment or current psychiatric treatment

5. History of neurological treatment or current neurological treatment

6. History of endocrinological treatment or current endocrinological treatment

7. Irremovable ferrous objects in or around the body (e.g. pacemaker, stents, splinters)

8. History of closed head injury

9. History of epilepsy

10. Claustrophobia

Study design

Design

Study type:	Interventional
Intervention model:	Crossover
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Placebo

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	01-01-2009
Enrollment:	20
Type:	Anticipated

Ethics review

Not applicable

Application type:	Not applicable

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
NTR-new	NL1394
NTR-old	NTR1454
Other	:
ISRCTN	ISRCTN wordt niet meer aangevraagd

Study results

Summary results
N/A