Learned oxytocin responses

Gepubliceerd: 22-12-2015 Laatst bijgewerkt: 15-05-2024

The aim of the study is to investigate the effect of conditioning with exogenous oxytocin on endogenous oxytocin release in healthy participants. We hypothesize that conditioning will lead to altered oxytocin levels.

Ethische beoordeling	Positief advies
Status	Werving gestopt
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON20692

Bron
NTR

Aandoening

Conditioning in healthy subjects

Ondersteuning

Primaire sponsor: Leiden University
Overige ondersteuning: European Research Council Consolidator Grant

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

The main study parameter is the difference in salivary oxytocin levels during evocation between the experimental group and the placebo group.

Toelichting onderzoek

Achtergrond van het onderzoek

Preliminary evidence suggests that endogenous hormone secretion, such as cortisol or insulin, might be behaviourally conditionable in humans. Whether other neuroendocrine hormones such as oxytocin can be conditioned as well is currently unclear and no studies focused on possible neural mechanisms of conditioning yet. The primary objective of the current study is to investigate the effect of conditioning with exogenous oxytocin on endogenous oxytocin release in a two-phase (acquisition and evocation) randomized placebo-controlled conditioning paradigm. Additionally, during the evocation phase (1st and 2nd evocation days), psychophysiological state and task-related assessments will be measured. On the third evocation day, resting state and task-related brain activity will be measured.

Doel van het onderzoek

The aim of the study is to investigate the effect of conditioning with exogenous oxytocin on endogenous oxytocin release in healthy participants. We hypothesize that conditioning will lead to altered oxytocin levels.

Onderzoeksopzet

The study consists of 7 sessions during the course of 3 weeks. In the first week, participants will be screened for medical and psychological conditions. In the second week, the acquisition phase - consisting of 3 sessions on 3 consecutive days - takes place and in the final week during the evocation phase - again consisting of 3 consecutive sessions - the conditioned responses will be tested.

Onderzoeksproduct en/of interventie

The design used in this study is based on a widely used randomized placebo-controlled conditioning paradigm, consisting of two phases (acquisition phase & evocation phase). During the acquisition phase, an association between a conditioned stimulus (CS, a distinctive odor) and an unconditioned stimulus (US, oxytocin) is established by repeated paired administration of both stimuli. In the evocation phase, it is tested whether exposure to the conditioned stimulus alone leads to the conditioned response. Participants will be randomly assigned to three groups. In the experimental group, participants will receive a 24 IU dose of oxytocin via a nasal spray during the acquisition phase and an identically looking placebo nasal spray during the evocation phase. In the placebo group, participants will receive a placebo in both phases. In the drug-control group, 24 IU of oxytocin will be administered in both phases.

Contactpersonen

Publiek

LUMC
PO Box 9555
A.W.M. Evers
Leiden 2300 RB
The Netherlands
+31 (0)71 527 3627

Wetenschappelijk

LUMC
PO Box 9555
A.W.M. Evers
Leiden 2300 RB
The Netherlands
+31 (0)71 527 3627

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

1. Between 18 and 35 years old;

2. Good understanding of written and spoken Dutch;

3. Taking oral contraceptives;

4. Healthy.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1. Current psychiatric (DSM-IV) conditions;

2. All conditions that might interfere with the participant's safety and/or the study protocol: claustrophobia, metal parts in or on the body that are not removable, Raynaud’s phenomenon, severe neurological or neurosurgical conditions;

3. (Intended) pregnancy or breast feeding;

4. Heavy use of (illegal) drugs including cannabis and habits of heavy drinking;

5. Known sensitivity or hypervigilance to one of the ingredients of the oxytocin or the odor used in this experiment.

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blindering:	Enkelblind
Controle:	Placebo

Deelname

Nederland

Status:	Werving gestopt
(Verwachte) startdatum:	01-01-2016
Aantal proefpersonen:	99
Type:	Werkelijke startdatum

Ethische beoordeling

Positief advies

Datum:	22-12-2015
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 42539

Bron: ToetsingOnline
Titel:

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL5452
NTR-old	NTR5596
CCMO	NL52683.058.15
OMON	NL-OMON42539

Resultaten

Samenvatting resultaten
n/a