Memory formation under stress in humans: Iinvestigation into the importance of hormone receptors.

Gepubliceerd: 29-08-2012 Laatst bijgewerkt: 19-03-2025

N/A

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

Samenvatting

ID

NL-OMON19893

Bron
NTR

Verkorte titel
Mem&MR

Aandoening

Stress
Cortisol
emotional memory
spatial memory

Ondersteuning

Primaire sponsor: Radboud University Nijmegen Medical Centre
Overige ondersteuning: NWO funding. investigator-driven research.

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

At the behavioural level, the main study parameter in the spatial memory task is accuracy (i.e. how well subjects remember the right location for a given object learned earlier) and the strategy used (i.e., automatic stimulus response association or elaborate spatial map strategy). For fear acquisition we assess how fast and accurate subjects learn the relationship between specific stimuli and threat using skin conductance responses. At the brain system level, we seek to investigate whether neural response patterns obtained by fMRI can reveal the neural mechanism by which MR activation is causing stress induced changes in spatial memory and fear learning.

Toelichting onderzoek

Achtergrond van het onderzoek

N/A

Doel van het onderzoek

N/A

Onderzoeksopzet

1 appointment for a medical screening, 2 appointments for the actual testing (3.5h and 1h, both in the afternoon on subsequent days).

Onderzoeksproduct en/of interventie

Half of the subjects will undergo a slightly modified version of the Socially Evaluated Cold Pressure Task (SECPT; Schwabe, Haddad, & Schachinger, 2008) to induce stress. The other half will undergo a control condition meant to cause no stress. Furthermore, half the subjects of the stress- and the non stress-group will receive a single dose Spironolacton (400mg tablet) before undergoing fMRI; the other participants will receive placebo.

Contactpersonen

Publiek

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The Netherlands

Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

1. Male, healthy volunteers;

2. Age 18 - 35 years;

3. Normal or corrected-to-normal vision;

4. Normal uncorrected hearing;

5. Body mass index between 18.5 and 30;

6. Willingness and ability to give written informed consent and willingness and ability to understand the nature and content, to participate and to comply with the study requirements.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1. Anuria;

2. Acute or history of renal insufficiency / impairment of renal excretory function (or creatinine levels > 1.1 mg/dl at screening);

3. Hyperkalemia (or potassium levels of > 5.0 mEq/L at screening);

4. History of psychiatric treatment /current psychiatric treatment;

5. History of neurological treatment /current neurological treatment;

6. History of endocrine treatment /current endocrine treatment;

7. History of autonomic failure (e.g., vasovagal reflex syncope);

8. History of psychotropic medication (e.g. antidepressants);

9. History of hepatic impairments;

10. History of cardiovascular diseases;

11. Hypotension (< 90 / 60 mmHG);

12. Bradycardia / Tachycardia (heart rate < 50 or > 100 at rest);

13. Use of any medication on a regular basis;

14. Metal objects in or around the body;

15. Irregular sleep/wake rhythm (e.g., regular nightshifts or cross timeline travel);

16. Claustrophobia;

17. Use of recreational drugs weekly or more often;

18. Smoking of more than 5 cigarettes per day;

19. Average use of more than 3 alcoholic beverages daily and self-reported inability or unease to cease drinking alcohol for 24 hours prior to testing;

20. Coffeine consumption 24 hours before testing;

21. Professional sports or participation in competitions (as Spironolacton can lead to a positive doping test).

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Factorieel
Toewijzing:	Gerandomiseerd
Blindering:	Dubbelblind

Controle:	Placebo

Deelname

Nederland

Status:	Werving gestopt
(Verwachte) startdatum:	21-02-2012
Aantal proefpersonen:	96
Type:	Werkelijke startdatum

Ethische beoordeling

Positief advies

Datum:	29-08-2012
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 35544
Bron: ToetsingOnline
Titel:

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL3444
NTR-old	NTR3595
CCMO	NL37819.091.11
ISRCTN	ISRCTN wordt niet meer aangevraagd.
OMON	NL-OMON35544

Resultaten

Samenvatting resultaten
N/A