Effects of 40 mg cortisol on emotion and cognitive performance under acute stress.

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In the proposed study we will investigate the effect

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

Samenvatting

ID

NL-OMON23086

Bron
NTR

Verkorte titel
Cortisol, emotion, and cognition.

Aandoening

Stress-induced emotional interference and decrease of cognitive performance

Ondersteuning

Primaire sponsor: Leiden University
Overige ondersteuning: Netherlands Organization for Scientific Research (NWO; #452-12-003)

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Emotional-interference: threat-interference during working memory performance (n-back

task with emotional distracters), threat- and positive interference (Pictorial Emotional Stroop Task, self-report cognitive interference during cognitive performance (CIQ).
Cognitive performance: working memory performance (n-back task), and executive cognitive performance (OSPAN task)

Toelichting onderzoek

Achtergrond van het onderzoek

Background: Previous evidence suggests that large single doses of exogenous cortisol (hydrocortisone) have acute effects on cognitive processing of emotional stimuli. However, such effects of hydrocortisone on cognitive performance under acute stress have never been tested even though this would be of considerable fundamental and eventually possibly practical importance. This should be investigated by assessing cognitive performance under stress and the influence of hydrocortisone administration.
Study design: A double-blind, placebo-controlled between-subjects experiment.

Study population: Eighty healthy female participants aged between 18 and 25 who will be recruited from Leiden University campus and online advertisements.

Intervention: Participants will receive either a placebo or 40 mg of hydrocortisone as capsules for oral intake, in the afternoon after limited dietary restrictions (no intake of nutrients 1.5 hour prior to drug/placebo administration).

Doel van het onderzoek

In the proposed study we will investigate the effect

Onderzoeksopzet

One timepoint: Participants come to the lab, complete the baseline measurements, take the medication (hydrocortisone or placebo), wait for an hour, and then do the rest of the tests.

Onderzoeksproduct en/of interventie

Intervention: single administration of 40 mg hydrocortisone capsule

Control condition: single administration of placebo capsule

Contactpersonen

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- age between 18 and 25.

- females.

- Sufficient knowledge of the Dutch language.

- high trait cognitive test anxiety (CTAS score above the median out of an online local study with over 1000 responses).

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- use of prescription medication other oral contraceptives

- Treatment for psychiatric, endocrine or neurological (CNS) medical problems in the past or

present.

- Use of corticosteroid medication (oral, nasal, injected) in the 6 months prior to enrollment or dermal corticosteroid medication in the week prior to enrollment.

- Regular smoking (more than 10 cigarettes per week) or any in the 12 hours prior to testing.

- Use of more than three alcoholic units per day.

- Frequent or recent use of cannabis (on average once a week or more frequent in the three months prior to enrollment or single use or more in the week prior to enrollment).

- Use of more than 3 units of alcohol in the last 24 hours, use of alcohol during the last 12 hours, or consumption of any other recreational drug in the last 24 hours prior to testing.

- Intensive physical cardiovascular sports training for more than 1 hour, at least 5 days a week.

- pregnancy

- lactation

- Raynaud syndrome

Onderzoeksopzet

Opzet

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

Deelname

Nederland

Status:	Werving gestart
(Verwachte) startdatum:	10-11-2017
Aantal proefpersonen:	80
Type:	Verwachte startdatum

Ethische beoordeling

Positief advies

Datum:	20-02-2018
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL6829
NTR-old	NTR7066
Ander register	ABR number: 62072 : LUMC METC file number: NL62072.058.17

Resultaten