Psilocybin as a tool for enhancing cognitive flexibility”

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Ethische beoordeling	Niet van toepassing
Status	Werving nog niet gestart
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON25919

Bron
Nationaal Trial Register

Aandoening

psilocybin, divergent thinking, neurotransmission

Ondersteuning

Primaire sponsor: University Maastricht (UM)
Overige ondersteuning: University Maastricht (UM)

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

To use psilocybin as a research tool in order to enhance divergent thinking, and facilitate relative goal-directed versus habitual behaviour during and after drug intoxication, and to assess whether psilocybin will deter a stress induced shift from goal directed to habitual behaviour.

Toelichting onderzoek

Achtergrond van het onderzoek

Posttraumatic stress disorder (PTSD) is an anxiety disorder in which an individual's ability to function is impaired by emotional responses to memories of a traumatic event. It is typically a chronic illness associated with high rates of psychiatric and medical comorbidity, disability, suffering, drug abuse, and suicide. However despite the high incidence of PTSD, current therapies provide limited effectiveness, with many people being unresponsive to treatment. Suggestions for effective treatments for PTSD include a hypothetical drug that would be capable of enhancing divergent thinking, a cognitive process used to generate as many innovative ideas as possible. A recent study from our lab showed that psychedelics significantly increased divergent thinking after drug intake. Furthermore, imaging studies have shown that the classic psychedelic, psilocybin, promotes a de-synchronization in the default mode network that is suggested to result in cognitive flexibility and enhanced creative thinking. Taken together these studies suggest that psilocybin can enhance divergent thinking, which may provide therapeutic potential in facilitating goal directed over habitual behaviour. Principal demonstrations showing that psilocybin facilitates cognitive flexibility would be very relevant for future support of clinical applications of psilocybin assisted therapy in PTSD patients, and may provide therapeutic potential for patients whom current options are not effective.

Doel van het onderzoek

The study will assess drug-induced change in performance in divergent thinking and goal-directed behaviour when comparing psilocybin to placebo, before and after an induction of stress. Additional study parameters include frontal-subcortical connectivity alterations and neurotransmission of glutamate and GABA between treatment conditions, as well as subjective questionnaires, pharmacokinetics, and cortisol.

Onderzoeksopzet

Measurements will take place up until 360 minutes after drug intake on testing day one. Testing day two includes up to 2.5 hours of follow up measurements.

Onderzoeksproduct en/of interventie

psilocybin (.17 mg/kg) bodyweight or placebo;
Maastricht acute stress test or placebo

Contactpersonen

Publiek

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

• Previous experience with a psychedelic drug, but not within the past 6 months.

• Age between 18 and 40 years

• Free from psychotropic medication

• Good physical health as determined by medical examination and laboratory analysis

• Absence of any major medical, endocrine and neurological condition

• Normal weight, body mass index (weight/height2) between 18 and 28 kg/m2

• Proficient knowledge of the English language, defined as having at least 5 years of English language education (in high school or other education)

• Written Informed Consent

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

• History of drug addiction (determined by the medical questionnaire, drug questionnaire and medical examination)

• Previous experience of serious side effects to psychedelic drugs (anxiety or panic attacks)

• Pregnancy or lactation

• Hypertension (diastolic> 90; systolic> 140)

• Current or history of psychiatric disorder (determined by the medical questionnaire and medical examination)

• Liver dysfunction

• History of cardiac dysfunctions (arrhythmia, ischemic heart disease,...)

• For women: no use of a reliable contraceptive

Onderzoeksopzet

Opzet

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

Deelname

Nederland

Status:	Werving nog niet gestart
(Verwachte) startdatum:	01-05-2017
Aantal proefpersonen:	60
Type:	Verwachte startdatum

Ethische beoordeling

Niet van toepassing
Soort: Niet van toepassing

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	NL6007
NTR-old	NTR6505
Ander register	METC : 173006

Resultaten