The role of 5-HT2 and 5-HT1A receptors in 3,4-methylenedioxymethamphetamine (MDMA) induced memory impairment and impulsivity.

Gepubliceerd: 03-06-2010 Laatst bijgewerkt: 18-08-2022

To determine the role of 5-HT2 and 5-HT1A receptors in learning and memory. It is expected that: 1. An acute dose of MDMA will produce impairments on laboratory measures of learning and memory; 2. MDMA-induced memory impairment will be reversed...

Ethische beoordeling	Positief advies
Status	Anders
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON23877

Bron
NTR

Aandoening

mdma users, cognition, 5HT

Ondersteuning

Primaire sponsor: NWO
Overige ondersteuning: NWO

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Neurocognitive measures of memory and impulse control.

Toelichting onderzoek

Achtergrond van het onderzoek

N/A

Doel van het onderzoek

To determine the role of 5-HT2 and 5-HT1A receptors in learning and memory. It is expected that:

1. An acute dose of MDMA will produce impairments on laboratory measures of learning and memory;

2. MDMA-induced memory impairment will be reversed by coadministration of ketanserin if impairment is related to direct or indirect stimulation of 5-HT2 receptors;

3. MDMA-induced memory impairment will be reversed by coadministration of pindolol if impairment is related to direct or indirect stimulation of 5-HT1A receptors.

Onderzoeksopzet

Neurocognitive measures will be taken at Tmax.

Onderzoeksproduct en/of interventie

Subjects will be treated with combinations of:

1. Ketanserin 50mg / MDMA 75mg (treatment 1);

2. Pindolol 20mg / MDMA 75mg (treatment 2);

3. Placebo / MDMA 75mg (treatment 3);

4. Pindolol 20 mg / placebo (treatment 4);

5. Ketaserin 50mg / placebo (treatment 5);

6. Placebo / placebo (treatment 6).

Drugs and placebo will be administered orally in identically appearing formulations. MDMA is administered as a 25 ml solution in bitter orange peel syrup, which is ingested at once. Ketanserin and pindolol will appear in capsule form. Drugs and placebo will be administered using a double dummy technique to synchronize Tmax for all drugs.

Contactpersonen

Publiek

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

1. Between 18 and 40 years of age;

2. Experience with the use of MDMA (at least 5 times, of which no less than one in the past 12 months);

3. Free from psychotropic medication;

4. Good physical health as determined by examination and laboratory analysis;

5. Absence of any major medical, endocrine and neurological condition;

6. Normal weight, body mass index (weight/length2) between 18 and 28 kg/m2;

7. Health insurance;

8. Written informed consent.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1. History of drug abuse (other than the use of MDMA) or addiction;

2. Pregnancy or lactation;

3. Cardiovascular abnormalities as assessed by standard 12-lead ECG;

4. Excessive drinking (> 20 standard alcoholic consumptions a week);

5. Smoking (>10 sigarettes a day);

6. Hypertension (diastolic> 100; systolic> 170);

7. Use of psychotropic medication;

8. History of psychiatric or neurological disorder.

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Cross-over
Toewijzing:	Gerandomiseerd
Blindering:	Dubbelblind
Controle:	Placebo

Deelname

Nederland

Status:	Anders
(Verwachte) startdatum:	01-03-2010
Aantal proefpersonen:	18
Type:	Onbekend

Ethische beoordeling

Positief advies

Datum:	03-06-2010
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	NL2227
NTR-old	NTR2352
Ander register	: P34 EPU
ISRCTN	ISRCTN wordt niet meer aangevraagd.

Resultaten

Samenvatting resultaten
N/A