Neurotransmission during THC intoxication

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON27947

Source NTR

Health condition

Neurotransmission and pharmacokinetics after cannabis administration

Sponsors and support

Primary sponsor: University of Maastricht Source(s) of monetary or material Support: University of Maastricht

Intervention

Outcome measures

Primary outcome

Neurotransmission of glutamate, GABA and dopamine will be assessed using MRS and resting state fMRI.

Secondary outcome

THC kinetics in blood, subjective experiences of drug, and cognitive performance

Study description

Background summary

The current project studies brain markers that reflect neuroadaptations in occasional and chronic cannabis users.

Acute influences of cannabis on neurotransmission in the limbic system are assessed in a placebo-controlled study.

Study objective

The study will assess brain kinetics of glutamate, GABA and dopamine during the absorption and elimination phase of THC.

And relate THC kinetics in blood to brain kinetics of neurotransmission and subjective experiences of drug liking and wanting.

Study design

Measurments will take place at and after Tmax of THC

Intervention

300 microg/kg bodyweight THC and placebo

Contacts

Public

Maastricht University E.L. Theunissen Maastricht The Netherlands 0433881940 **Scientific** Maastricht University E.L. Theunissen Maastricht The Netherlands 0433881940

Eligibility criteria

Inclusion criteria

Occasional users (N=20): Used cannabis between 1 times a month and 1 times a week during the previous year

Chronic users (N=20): Used cannabis more than 3 times a week during the previous year • 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
- Written Informed Consent
- Good knowledge and understanding of the Dutch language

Exclusion criteria

• History of drug abuse (other than the use of cannabis) or addiction (determined by the medical questionnaire, drug questionnaire and medical examination)

- Pregnancy or lactation
- Hypertension (diastolic> 90; systolic> 140)

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

- Liver dysfunction
- (Serious) side effects to previous cannabis
- History of cardiac dysfunctions (arrhythmia, ischemic heart disease,...)
- For women: no use of a reliable contraceptive

Study design

Design

Study type:	Interventional
Intervention model:	Crossover
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	Placebo

Recruitment

NL	
Recruitment status:	Recruiting
Start date (anticipated):	01-11-2014
Enrollment:	40
Туре:	Anticipated

IPD sharing statement

Plan to share IPD: No

Ethics review

Positive opinion	
Date:	
Application type:	

07-11-2014 First submission

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
NTR-new	NL4692
NTR-old	NTR4897
Other	METC Azm/UM : METC 143037

Study results