The acute effects of cannabis on the brain

No registrations found.

Ethical review Positive opinion

Status Pending

Health condition type -

Study type Interventional

Summary

ID

NL-OMON27472

Source

Nationaal Trial Register

Brief title

Cannabis as a cause of psychosis: an ecogenetic study linking cannabis-induced dopamine response to psychotic mechanisms and experiences

Health condition

cannabis psychosis dopamine

Sponsors and support

Primary sponsor: Maastricht University

Source(s) of monetary or material Support: NWO and Maastricht University

Intervention

Outcome measures

Primary outcome

A. Striatal dopamine response after THC and placebo, as measured with PET and [18F]fallypride

B. Psychotic experiences after THC and placebo, as measured with i) novel computer-assisted tasks and ii)clinical interviews

Secondary outcome

C. Influence of genetic variation

Study description

Background summary

The study aims at elucidating the biological mechanism behind the cannabis-psychosis relationship. By using PET and [18F]fallypride, the striatal dopamine response is measured after THC or placebo exposure. Novel computer-assisted tasks as well as clinical interviewing are used to assess psychotic experiences behaviorally.

Study objective

- 1. Cannabis use increases striatal dopamine release
- 2. Striatal dopamine release predicts cannabis induced-psychotic experiences
- 3. Cannabis-induced striatal dopamine response varies as a function of genetic risk for psychosis

Study design

One timepoint (t1)

Intervention

Exposure to delta-9-tetrahydrocannabinol (THC, psychoactive component of cannabis, 8 mg) and placebo

Contacts

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Scientific

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Eligibility criteria

Inclusion criteria

- 1. Aged between 18 and 50
- 2. Life-time use of cannabis without having experienced negative effects (e.g. bad trip, toxic psychosis)
- 3. BMI between 18.5 and 27
- 4. Having signed informed consent
- 5. Clinical diagnosis of non-affective schizophrenia or psychotic disorder according to DSM-IV (REFERS ONLY TO PATIENTS)

Exclusion criteria

- 1. Head trauma
- 2. Respiratory, cardiovascular, neurological disease, severe renal or liver dysfunction
- 3. Alcohol use in excess of 5 units per day
- 4. Weekly use of illicit drugs (other than cannabis)
- 5. Current use of antipsychotic medication or medication known to interfere with the CB1 receptor (e.g. rimonabant)

- 6. Pregnancy and breastfeeding
- 7. Personal or family history of psychosis (REFERS ONLY TO HEALTHY CONTROLS)

Study design

Design

Study type: Interventional

Intervention model: Crossover

Allocation: Randomized controlled trial

Masking: Double blinded (masking used)

Control: Placebo

Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 01-06-2008

Enrollment: 30

Type: Anticipated

Ethics review

Positive opinion

Date: 19-05-2008

Application type: 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 NL1272 NTR-old NTR1318 Other : 200801

ISRCTN wordt niet meer aangevraagd

Study results

Summary results

N/A