Dopaminergic and noradrenergic brain mechanisms underlying attention, cognitive performance and reward learning.

No registrations found.

Ethical review	Positive opinion
Status	Recruitment stopped
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON24350

Source
Nationaal Trial Register

Brief title
STRAX

Health condition

Psychiatric illness; ADHD; depression; schizophrenia; cognitive abilities; attention; executive functions; reward learning

Sponsors and support

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

Intervention

Outcome measures

Primary outcome

Performance on neuropsychological tests and associated brain activity (MRI)

Secondary outcome

Reaction-speed and performance (% correct) at several focus and learning tasks.

Study description

Study objective

In comparison to placebo (PLC), atomoxetine (ATX) alters specific components of brain networks underlying cognition and reward-related networks and modulates task performance.

Study design

3 timepoints. Session 1 (Day 1), Session 2 (Day 4), session 3 (Day 11).

Intervention

The study consists of three sessions.

Session 1: In a 1-hour session, we will measure mood variables and executive functions.

Session 2 and 3:We will measure attention-related skills and related brain activity with neuropsychological tasks and MRI. On one occasion, the participant receives a placebo (a fake pill) and on the other occasion atomoxetine 60mg (oral; a safe challenge that temporarily increases noradrenaline and dopamine in the brain).

Contacts

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Eligibility criteria

Inclusion criteria

- Male gender

- Age between 18 and 30

- Right-handed

Exclusion criteria

- Psychiatric disorders

- Neurological disorders

- Endocrine disorders

- Drug or alcohol dependence

- Current (recreational) drug use; will be checked in urine

- Recent use of corticosteroids

- Past/current psychopharmacological treatment (e.g. antidepressants, antipsychotics, mood stabilisers, sleeping medication)

- High (>28) or low (<18) Body-Mass Index

- Contraindication for a magnetic resonance imaging (MRI) scan

Study design

Design

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

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	01-11-2015
Enrollment:	20
Type:	Actual

Ethics review

Positive opinion

Date:	19-01-2016
Application type:	First submission

Study registrations

Followed up by the following (possibly more current) registration

ID: 43560
Bron: ToetsingOnline
Titel:

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

No registrations found.

In other registers

Register	ID
NTR-new	NL5558
NTR-old	NTR5679
CCMO	NL53913.068.15
OMON	NL-OMON43560

Study results