Memory reconsolidation: a new treatment approach towards nicotine addiction.

Published: 16-10-2018 Last updated: 12-04-2024

Whether disrupting reconsolidation by a noradrenergic beta-blocker provides long-term relief

from nicotine-addiction.

Ethical reviewApproved WMOStatusRecruitment stoppedHealth condition typeOther conditionStudy typeInterventional

Summary

ID

NL-OMON48641

Source

ToetsingOnline

Brief title

New treatment for smoking cessation.

Condition

Other condition

Synonym

nicotine-addiction, smoking

Health condition

nicotine-verslaving

Research involving

Human

Sponsors and support

Primary sponsor: TNO

Source(s) of monetary or material Support: TNO

Intervention

Keyword: addiction, memory, reconsolidation, smoking

Outcome measures

Primary outcome

Smokingstatus, as assessed by using an online smoking-diary.

Secondary outcome

- breath monoxide assessment;
- urine cotinine levels;
- questionnaires related to withdrawal symptoms.

Study description

Background summary

Smoking is one of the leading causes of preventable death globally. Quitting before the age of 40 reduces the risk of dying from smoking-related diseases by nearly 90%. Given that existing therapies have limited long-term efficacy, there is a pressing need for innovation in the smoking cessation field.

Study objective

Whether disrupting reconsolidation by a noradrenergic beta-blocker provides long-term relief from nicotine-addiction.

Study design

Double-blind randomized placebo-controlled trial.

Intervention

Single reactivation session of smoking-related behavior followed by the

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administration of 40 mg of the noradrenergic beta-blocker propranolol.

Study burden and risks

Participants are receiving a short treatment that is expected to diminish their nicotine-addictive behavior. Based on the SPC we expect that propranolol HCl will be well tolerated and do not anticipate any serious adverse events.

Contacts

Public

TNO

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Scientific

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years) Elderly (65 years and older)

Inclusion criteria

- aged between 18 and 65 years;
- smoking 10 or more cigarettes per day for at least 12 months;
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- written approval of participant's own general practitioner for participation.

Exclusion criteria

- cardiovascular diseases or irregular heartbeat;
- hypotension or hypertension;
- pregnancy or breastfeeding;
- epilepsy;
- current state of asthma or COPD, which necessitates medication use.

Study design

Design

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Double blinded (masking used)

Control: Placebo

Primary purpose: Treatment

Recruitment

 NL

Recruitment status: Recruitment stopped

Start date (anticipated): 27-01-2020

Enrollment: 75

Type: Actual

Medical products/devices used

Product type: Medicine

Brand name: te genereren door farmaceutisch bedrijf

Generic name: propranolol hydrochloride

Registration: Yes - NL outside intended use

Ethics review

Approved WMO

Date: 16-10-2018

Application type: First submission

Review commission: METC Amsterdam UMC

Approved WMO

Date: 28-08-2019

Application type: First submission

Review commission: METC Amsterdam UMC

Approved WMO

Date: 18-11-2019

Application type: Amendment

Review commission: METC Amsterdam UMC

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

EudraCT EUCTR2018-002829-33-NL

CCMO NL66903.018.18