Preventing the return of Fear: A pilot study with healthy volunteers

Published: 23-09-2010
Last updated: 02-05-2024

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Ethical review	Approved WMO
Status	Recruiting
Health condition type	Anxiety disorders and symptoms
Study type	Observational non invasive

Summary

ID

NL-OMON35082

Source
ToetsingOnline

Brief title
prof

Condition

- Anxiety disorders and symptoms

Synonym
nvt

Research involving
Human

Sponsors and support

Primary sponsor: Erasmus MC, Universitair Medisch Centrum Rotterdam
Source(s) of monetary or material Support: NWO;VIDI Steven Kushner

Intervention

Keyword: Conditioning, Fear, Reconsolidation

Outcome measures

Primary outcome

Heart rate, skin conductance level.

Secondary outcome

Eye blink startle response.

Study description

Background summary

Learning about potential dangers in the environment is critical for adaptive function, but at times learning can be maladaptive and result in excessive fear and anxiety. Recent studies of Schiller et al. (2009) and Kindt et al. (2009) has shown that the return of emotional memories in humans can be prevented after fear conditioning, which has important implications for the treatment of anxiety disorders. Kindt et al. shows this by oral administration of the β-adrenergic receptor antagonist Propanolol given before memory reactivation. Schiller et al. on the other hand, introduced a non-invasive technique. They show that it can be prevented that emotional memories return after extinction training using a simple behavioral intervention. The present study aims at replicating these findings. In this study we would like to test whether an exactly timed reminder of an emotional memory can prevent the spontaneous recovery of the emotional part of this memory in a standard fear conditioning paradigm.

Study objective

The present study aims at testing fear conditioning in healthy volunteers. We want to examine whether behavioural results are comparable to the results reported in the literature and if they are suitable for use in future studies with (pharmacological) interventions and different patient groups. In order to achieve this, we would like to do a pilot fear conditioning experiment. This to gain expertise in fear measurements for future fear conditioning experiments and especially test whether the behavioural findings after extinction training found by Schiller et al., can be replicated in our laboratory. The goal of the experiment is to replicate the prevention of spontaneous fear recovery when

extinction training is conducted during the time window in which the fear memory is proposed to be undergoing reconsolidation. Based on the work of Kindt and Schiller, we would like to combine and compare different methods to measure fear (fear potentiated eye blink startle with fear relevant stimuli and skin conductance with neutral stimuli, respectively) to explore the possibilities of fear conditioning and the effects of these differences. By making different combinations to the standard fear conditioning paradigm, we hope to find a strong and suitable method for fear measurement.

Study design

Observational study.

Study burden and risks

Participants have to undergo fear conditioning, extinction training and re-extinction on three consecutive days. At unexpected moments during these experiments the participants can receive mild but painless electrical shocks to the wrist, noises of high intensities through headphones and/or fear-relevant images on a computer screen. Total duration of the experiment is about 3 hours. Participants receive 50 euros for their voluntary participation. There are negligible risks associated with this study.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

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

Inclusion criteria

Age between 18 and 40

Exclusion criteria

Major somatic or psychiatric illness, seeing a medical specialist
Medication within the last month
Uncorrected vision disturbances
Insufficient knowledge of Dutch language

Study design

Design

Study type: Observational non invasive

Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Other

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	01-10-2010
Enrollment:	40
Type:	Actual

Ethics review

Approved WMO Date:	23-09-2010
Application type:	First submission
Review commission:	METC Erasmus MC, Universitair Medisch Centrum Rotterdam (Rotterdam)

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
CCMO	NL31341.078.10