The role of sleep in emotional memory processing and neurocognitive functioning in patients with posttraumatic stress disorder

Published: 28-06-2012 Last updated: 30-04-2024

This project aims to investigate the role of sleep on memory processing in PTSD. The primary aim of the study is to assess the effects of sleep architecture on emotional memory processing and neurocognitive functioning in subjects with and without...

Ethical review Approved WMO

Status Recruitment stopped

Health condition type Anxiety disorders and symptoms

Study type Observational non invasive

Summary

ID

NL-OMON37626

Source

ToetsingOnline

Brief title

Sleep and memory in PTSD

Condition

Anxiety disorders and symptoms

Synonym

Posttraumatic stress disorder, posttraumatic stress syndrome

Research involving

Human

Sponsors and support

Primary sponsor: Academisch Medisch Centrum

Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: Memory, Polysomnography, Posttraumatic stress disorder, Sleep

Outcome measures

Primary outcome

The primary study parameters are memory for emotional and neutral film fragments, physiological signals during film fragments (ECG, respiratory effort, galvanic skin response), and emotional responses during the film fragments. Further main study parameters are neurocognitive functions (attention, planning, declarative memory).

Secondary outcome

Correlates of sleep architecture will also be investigated in stress hormones.

For the patient group, predictive effects of sleep architecture and memory

processes on response to treatment will be studied.

Study description

Background summary

Posttraumatic stress disorder (PTSD) is a mental health problem with a high prevalence in the general population; 8% of the population is diagnosed with this disorder during their lives. Previous sleep studies in healthy subjects suggest the occurrence of adaptive changes in sleep architecture after emotional experiences, which likely play a role in emotional housekeeping and attenuation of the emotional responses towards negative emotional experiences. Sleep thus seems important for emotional recovery from traumatic experiences and PTSD.

Study objective

This project aims to investigate the role of sleep on memory processing in

PTSD. The primary aim of the study is to assess the effects of sleep architecture on emotional memory processing and neurocognitive functioning in subjects with and without PTSD. A secondary objective of the study is to assess the relationship between sleep architecture and efficacy of PTSD treatment for the patient group.

Study design

Controlled patient study with two experimental groups and a control group. Effects of sleep architecture will be assessed in emotional and neutral memory tasks, performed before and after sleep. Sleep architecture will be assessed by performing nightly polysomnography (PSG).

Study burden and risks

The burden and risks associated with participation in this study are reasonable. Participants can follow the regular clinical procedure for assessment and treatment with one extra week between intake and start of treatment. The confrontation with emotional film material and/or being interviewed about the symptoms can be an emotional burden. The proposed procedures are not invasive.

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

Inclusion criteria for the PTSD group are:

- 1) Meeting diagnostic criteria for PTSD according to Clinician-Administered PTSD Scale (CAPS) with a total score of at least 50;
- 2) Age between 18 and 65;
- 3) Eligible for trauma-focused psychotherapy;
- 4) Written informed consent.;Inclusion criteria for the trauma-exposed control group are:
- 1) Having experienced at least one traumatic event as defined by DSM-IV in the absence of diagnostic criteria for PTSD according to CAPS and criteria for severe MDD according to MINI-PLUS clinical interview:
- 2) Age between 18 and 65;
- 3) Written informed consent.;Inclusion criteria for the non-trauma exposed control group are:
- 1) Having experienced no traumatic events as defined by DSM-IV and absence of diagnostic criteria for PTSD according to CAPS and criteria for severe MDD according to MINI-PLUS clinical interview;
- 2) Age between 18 and 65:
- 3) Written informed consent.

Exclusion criteria

Exclusion criteria for all groups are:

- 1) Acute suicidality;
- 2) Presence of a psychotic disorder, bipolar disorder, depression with psychotic features, or excessive substance related disorder over the past 3 months;
- 3) Prior history of neurological or sleep disorders, or an atypical sleep pattern with less than 6 hours sleep per night, or sleep time outside the window of 10 PM till 10 AM (for the PTSD group: neurological or sleep disorders prior to onset of PTSD).

Study design

Design

Study type: Observational non invasive

Intervention model: Other

Allocation: Non-randomized controlled trial

Masking: Open (masking not used)

Control: Active

Primary purpose: Basic science

Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 26-07-2012

Enrollment: 90

Type: Actual

Ethics review

Approved WMO

Date: 28-06-2012

Application type: First submission

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

CCMO NL38987.018.11