The effects of Modafinil on functional magnetic resonance imaging (fMRI) brain activation and functional performance during visual stimulation and visually guided tracking manoeuvres after sleep deprivation

Submission date	Recruitment status	Prospectively registered
24/02/2005	Stopped	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
13/04/2005	Stopped	Results
Last Edited	Condition category	Individual participant data
16/09/2009	Nervous System Diseases	Record updated in last year

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Contact details

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

C03.056

Study information

Scientific Title

Acronym

Modafinil Study

Study objectives

Therefore we wish to examine brain activity and performance during hand/eye tracking manoeuvres, (as quantified by fMRI and our tracking tasks), in normal subjects before and after total sleep deprivation following treatment with Modafinil or placebo. We will compare whether the Modafinil has reversed the effects of the sleep deprivation, compared to placebo

Ethics approval required

Old ethics approval format

Ethics approval(s)

Not provided at time of registration

Study design

Randomised controlled trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Hospital

Study type(s)

Other

Participant information sheet

Health condition(s) or problem(s) studied

N/A

Interventions

Please note that as of 16/09/09 the status of this trial has been changed to "Stopped" due to relocation of primary investigator (PI) and lack of funding.

Each subject will be scanned 3 times, the first as a baseline, after normal sleep, and then twice after sleep deprivation, following treatment with Modafinil or placebo, in random order. Within each scanning session the subject will perform a series of hand/eye tracking tests of varying difficulty in random order, and a global visual stimulation test. Following the scans objective sleepiness will be quantified from the OSLER test of subjective sleepiness and steering ability will be quantified from the Oxford Steering Simulator. Subjects will be pre-trained to stable performance on the tracking task prior to fMRI scanning.

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

Modafinil

Primary outcome measure

The primary endpoint of the trial is the difference in activation of the occipital visual cortex area responsible motion detection (V5/MT) during global visual stimulation after Modafinil and placebo

Secondary outcome measures

Sleep latency (measured by the OSLER test), driving simulator performance and tracking error will be secondary endpoints

Overall study start date

01/08/2004

Completion date

30/06/2006

Reason abandoned (if study stopped)

Lack of staff/facilities/resources

Eligibility

Key inclusion criteria

30 Healthy volunteers between the ages of 18-65

Participant type(s)

Healthy volunteer

Age group

Adult

Lower age limit

18 Years

Upper age limit

65 Years

Sex

Both

Target number of participants

30

Key exclusion criteria

Previous neurological disease

Date of first enrolment

01/08/2004

Date of final enrolment

30/06/2006

Locations

Countries of recruitment

England

United Kingdom

Study participating centre Consultant in Respiratory Medicine

Oxford United Kingdom OX3 7LJ

Sponsor information

Organisation

Oxford Radcliffe Hospitals NHS Trust (UK)

Sponsor details

University of Oxford (NDM)
Level 5, John Radcliffe Hospital
Headington
Oxford
England
United Kingdom
OX3 9DU

Sponsor type

Hospital/treatment centre

ROR

https://ror.org/03h2bh287

Funder(s)

Funder type

Industry

Funder Name

Cephalon UK Ltd (UK) (ref: Davies2004/unrestricted grant)

Results and Publications

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration