# Investigating the neural basis of inhibition, setshifting and monitoring in obsessive-compulsive disorder (OCD), attention-deficit hyperactivity disorder (ADHD) and healthy volunteers

Submission date	Recruitment status	<ul><li>Prospectively registered</li></ul>
30/07/2010	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
30/07/2010	Completed	Results
Last Edited	Condition category	Individual participant data
04/10/2017	Mental and Behavioural Disorders	Record updated in last year

## Plain English summary of protocol

Not provided at time of registration

# **Contact information**

# Type(s)

Scientific

#### Contact name

Dr Mercedes Arroyo

#### Contact details

Behavioural and Clinical Neuroscience Institute
Department of Psychiatry
University of Cambridge
Downing Street
Cambridge
United Kingdom
CB2 3EB

ma10027@cam.ac.uk

# Additional identifiers

#### Protocol serial number

6443

# Study information

#### Scientific Title

Investigating the neural basis of inhibition, set-shifting and monitoring in obsessive-compulsive disorder (OCD), attention-deficit hyperactivity disorder (ADHD) and healthy volunteers

#### **Study objectives**

The purpose of these experiments is to investigate the relationship between dysfunction in different but related executive processes including set-shifting, inhibition and monitoring in obsessive-compulsive disorder (OCD) and attention-deficit hyperactivity disorder (ADHD). Moreover, the study aims to clarify the precise neural substrates of the above executive functions currently conceived of s separate yet related.

To this end, a battery comprising of distinct yet converging tasks examining the three components of executive functions has been designed, specifically targeting set-shifting, response inhibition and performance monitoring. The design will contrast behavioral, bloodoxygen-level-dependent (BOLD) activation and brain structure between the ADHD group and its age and education matched control group and between the OCD group and its age and education matched control group. Each task will be analysed separately. The four groups will also enter into combined analyses to contrast the two patient groups directly.

More details can be found here: http://public.ukcrn.org.uk/Search/StudyDetail.aspx? StudyID=6443

#### Ethics approval required

Old ethics approval format

## Ethics approval(s)

MREC approved ref: 08/H308/65

## Study design

Multicentre non-randomised interventional diagnosis and process of care trial

# Primary study design

Interventional

## Study type(s)

Diagnostic

# Health condition(s) or problem(s) studied

Topic: Mental Health Research Network; Subtopic: Attention deficit hyperactivity conduct disorder; Disease: Attention deficit hyperactivity disorder; conduct disorders

#### Interventions

- 1. Face to face interview: once, approximately 10 minutes duration
- 2. Imaging (not radiation): twice, 1 hour each time; each participant will undergo functional magnetic resonance imaging (fMRI)
- 3. Telephone interview: once, approximately 20 minutes duration

#### Intervention Type

#### Mixed

# Primary outcome(s)

Blood oxygenation level dependent (BOLD) response due to neural activity.

# Key secondary outcome(s))

Reaction times and button choices to the stimuli being presented while in the scanner and questionnaire responses.

#### Completion date

01/04/2012

# **Eligibility**

#### Key inclusion criteria

Not provided at time of registration

#### Participant type(s)

**Patient** 

## Healthy volunteers allowed

No

#### Age group

**Not Specified** 

#### Sex

**Not Specified** 

#### Key exclusion criteria

Not provided at time of registration

#### Date of first enrolment

01/04/2008

#### Date of final enrolment

01/04/2012

# Locations

#### Countries of recruitment

**United Kingdom** 

England

# Study participating centre University of Cambridge

Cambridge

# Sponsor information

## Organisation

Cambridgeshire and Peterborough NHS Foundation Trust (UK)

#### **ROR**

https://ror.org/040ch0e11

# Funder(s)

# Funder type

Charity

#### **Funder Name**

Wellcome Trust

# Alternative Name(s)

# **Funding Body Type**

Private sector organisation

## **Funding Body Subtype**

International organizations

#### Location

**United Kingdom** 

# **Results and Publications**

Individual participant data (IPD) sharing plan

# IPD sharing plan summary

Not provided at time of registration