Stress and retrieval of heroin-related memories in abstinent heroin addicts

Submission date	Recruitment status No longer recruiting	Prospectively registered		
21/12/2008		☐ Protocol		
Registration date 23/01/2009	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited 04/07/2019	Condition category Mental and Behavioural Disorders	Individual participant data		

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

Protocol serial number N/A

Study information

Scientific Title

Stress enhances retrieval of heroin-related memories through concurrent effect on glucocorticoids and norepinephrine in abstinent heroin addicts

Study objectives

We hypothesised that stress may enhance retrieval of heroin-related memories in heroin addicts and this effect involved the noradrenergic systems and glucocorticoids.

Ethics approval required

Old ethics approval format

Ethics approval(s)

The study was approved by Human Investigating Committee of the Peking University Health Center on the 20th August 2007 (ref: 21); clinical trial (medicine) check in 2007.

Study design

Double-blind randomised placebo-controlled design

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Heroin addiction

Interventions

There are three groups:

- 1. Propranolol 40 mg
- 2. Cortisol 50 mg
- 3. Placebo

The trial is an acute administration drug and all of them were given orally once.

Intervention Type

Drug

Phase

Not Applicable

Drug/device/biological/vaccine name(s)

Propranolol, cortisol

Primary outcome(s)

The effect of propranolol and cortisol administration on heroin-related memory retrieval in abstinent heroin addicts, measured 1 hour after the medicine treatment.

Key secondary outcome(s))

The effect of propranolol and cortisol on salivary cortisol levels 1 hour after drug administration.

Completion date

30/08/2008

Eligibility

Key inclusion criteria

- 1. Aged from 20 to 40 years, male only
- 2. Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV) criteria for heroin dependence with opiate free for at least one month
- 3. No use of other drugs

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

Male

Total final enrolment

102

Key exclusion criteria

- 1. Current use of any medications
- 2. Current DSM-IV diagnosis of any affective, anxiety, or psychotic disorder
- 3. Current dependence on any substance besides heroin and nicotine (based on DSM-IV criteria)
- 4. Risk factors for untoward side effects from propranolol and cortisol (i.e., irregular heartbeats, history of cardiogenic shock, history of severe heart failure, asthma, fungal infections, hyperlipidaemia, history of hypertension, or abnormal electrocardiogram [ECG] or other laboratory findings)

Date of first enrolment

20/01/2008

Date of final enrolment

30/08/2008

Locations

Countries of recruitment

China

Study participating centre National Institute on Drug Dependence

Beijing China 100191

Sponsor information

Organisation

The National Basic Research Program of China (973 Program) (China)

ROR

https://ror.org/027s68j25

Funder(s)

Funder type

Government

Funder Name

The National Basic Research Program of China (973 Program) (China)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/02/2010	04/07/2019	Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes