# SOCIAL-EMOTIONAL BEHAVIOUR IN MALE PSYCHOPATHS AFTER DOUBLE-BLIND PLACEBO-CONTROLLED ADMINISTRATION OF INTRANASAL OXYTOCIN

Published: 02-04-2012 Last updated: 26-04-2024

Fundamental research with the objective to gain more insight in empathic processes within people suffering from psychopathy. Goal is to evaluate if affective empathic can be temporarily altered (in terms of minutes).

Ethical reviewApproved WMOStatusRecruitingHealth condition typeOther condition

**Study type** Observational non invasive

## **Summary**

#### ID

NL-OMON39859

#### **Source**

ToetsingOnline

#### **Brief title**

BEHAVIOUR\_RESPONSES\_AFTER\_OT/1.5

## **Condition**

Other condition

#### Synonym

psychopathy; empathy

## **Health condition**

Persoonlijkheidsstoornis (psychopathie)

## Research involving

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Human

## **Sponsors and support**

**Primary sponsor:** Universiteit Utrecht

Source(s) of monetary or material Support: Fonds Economische Structuurversterking

## Intervention

**Keyword:** Empathy, Oxytocin, Psychopathy, Social Behaviour

## **Outcome measures**

## **Primary outcome**

- Reading the Mind in the Eyes Test (Baron Cohen, 2001);
- Subjective feelings of affective empathy on a Visual Analogue Scale, conform the Multifaceted Empathy Test (MET; Dziobek et al., 2008);
- Facial electromyographic (EMG) mimicry recording of the zygomaticus major and the corrugator supercilii muscle activity, following basic emotion inducing film fragments,

## **Secondary outcome**

The equilibrium of the parasympathetic and sympathetic nerve system will be measured in terms of heart rate, respiration and skin conductance;

Saliva sampling before and after test procedures, reflecting baseline functioning of the HPA-axis (cortisol) and HPG-axis (testosterone and estradiol).

# **Study description**

### **Background summary**

Psychopathy is a personality disorder persisting through the lifespan. It

encompasses disturbances in the emotional, interpersonal and behavioral domains. Psychopathy is operationally defined by the Psychopathy Checklist-Revised Version (PCL-R; Hare, 1991, 2003). Participants are fully aware of their diagnosis of psychopathy.

A major component of psychopathy is an empathic disfunctioning. Empathy is a multidimensional construct that plays an important role in social understanding and social relationships. According to Soderstrom (2003) psychopathy should be regarded an empathy disorder. As there is growing evidence that the nonapetide oxytocin is involved in the processing of cognitive empathy it is hypothesized that application of oxytocin in male psychopaths will lead to a temporarily improvement of the psychopath's affective empathy, too.

## Study objective

Fundamental research with the objective to gain more insight in empathic processes within people suffering from psychopathy. Goal is to evaluate if affective empathic can be temporarily altered (in terms of minutes).

## Study design

The study follows a within-subjects, double-blind, counterbalanced placebo-controlled design in male in-patients with psychopathy. Subjects will participate in both experimental and placebo condition of which the order is counterbalanced. Time period between sessions will be at least one week.

#### Intervention

Procedures on both days are identical and consist of an explanation of the tasks to be performed, the intranasal administration of either placebo or OT followed by neuropsychological tests displayed on a computer screen whilst physiological data are obtained.

Participants will be invited to undergo saliva sampling of indices of HPA-axis (i.e. cortisol) and HPG-axis (i.e. testosterone and estradiol) on the two trial days.

## Study burden and risks

No burden or risks to be expected.

# **Contacts**

#### **Public**

Nederlands Instituut voor Forensische Psychiatrie en Psychologie

Heidelberglaan 2 Utrecht 3584CS

NL

#### Scientific

Nederlands Instituut voor Forensische Psychiatrie en Psychologie

Heidelberglaan 2 Utrecht 3584CS NL

## **Trial sites**

## **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

## Age

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

## Inclusion criteria

- MALE SEX;;- DIAGNOSIS OF PSYCHOPATHY ACCORDING TO PSYCHOPATHY CHECKLIST - REVISED;;- GOOD PHYSICAL HEALTH;;- AGE BETWEEN 18 AND 60;;- NORMAL OR CORRECTED TO NORMAL VISION; ;- INTELLIGENCE NO LESS THAN BORDERLINE INTELLCTUAL FUNCTIONING.

## **Exclusion criteria**

- OVERSENSITIVITY FOR OXYTOCIN OR CARRIER;;- COLOUR BLINDNESS;;- ILLITERATE OR INSUFFICIENT KNOWLEDGE OF DUTCH LANGUAGE;;- USE OF SSRI'S, MOOD STABILIZERS (E.G. LITHIUM), ANTIPSYCHOTICS OR HORMONAL TREATMENT FOR LIBIDO INHIBITION;;- USE OF ALCOHOL OR RECREATIONAL DRUGS WITHIN LAST 24 HOURS;;- CURRENT PSYCHOTIC DISORDER;;- CURRENT SEVERE DEPRESSIVE DISORDER;;- CURRENT SEVERE ANXIETY DISORDER;;- COMMON COLD WITH SEVERE RUNNING NOSE, CURENTLY OR WITHIN PREVIUOS SEVEN DAYS;;- HISTORY OF NEUROLOGICAL TREATMENT OF BRAIN STRUCTURES OR CURRENT NEUROLOGICAL TREATMENT;;- HISTORY OF ENDOCRINOLOGICAL TREATMENT OR CURRENT ENDOCRINOLOGICAL TREATMENT;;- HISTORY OF SEVERE CLOSED HEAD INJURY WITH LOSS OF CONSCIOUSNESS > 15 MINUTES::- PATIENT'S LEGAL INCAPACITY 4 - SOCIAL-EMOTIONAL BEHAVIOUR IN MALE PSYCHOPATHS AFTER DOUBLE-BLIND PLACEBO-CONTRO ...

# Study design

## **Design**

Study type: Observational non invasive

Intervention model: Crossover

Allocation: Randomized controlled trial

Masking: Double blinded (masking used)

Control: Placebo
Primary purpose: Other

## Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 21-11-2013

Enrollment: 20

Type: Actual

## Medical products/devices used

Product type: Medicine

Brand name: Syntocinon

Generic name: oxytocin

Registration: Yes - NL outside intended use

## **Ethics review**

Approved WMO

Date: 02-04-2012

Application type: First submission

Review commission: METC NedMec

Approved WMO

Date: 14-06-2012

Application type: First submission

Review commission: METC NedMec

Approved WMO
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12-05-2025

Date: 12-05-2014

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 23-06-2014

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 17-10-2014

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 17-11-2014

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 10-07-2015

Application type: Amendment

Review commission: METC NedMec

# **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

EudraCT EUCTR2010-024432-42-NL

CCMO NL35148.041.12