# Influence of stress vulnerability on type and course of bipolar disorder.

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Stress vulnerability as reflected by cortisolreceptor gene polymorphisms, influences course of bipolar disorder defined by number of episodes, physical health and cognitive functioning.

**Ethische beoordeling** Positief advies **Status** Werving gestopt

Type aandoening -

**Onderzoekstype** Observationeel onderzoek, zonder invasieve metingen

# **Samenvatting**

#### ID

NL-OMON23244

**Bron** 

NTR

Verkorte titel

Blpolarity and Stress Study, BISStudy

**Aandoening** 

Bipolar Disorder

# **Ondersteuning**

Primaire sponsor: Parnassia Bavo Groep/ PsyQ The Hague

Erasmus MC Rotterdam

**LUMC** 

Overige ondersteuning: Nuts Ohra

PsyQ The Hague

## Onderzoeksproduct en/of interventie

#### **Uitkomstmaten**

#### Primaire uitkomstmaten

# **Toelichting onderzoek**

#### Achtergrond van het onderzoek

Background of the study:

Stress causes a spectrum of autonomic, endocrine and behavioural responses. There is ample evidence that bipolar disorder is associated with a chronic dysregulation of the Hypothalamic- Pituitary- Adrenal axis. Cortisol is the central hormone in the stress-response and has its effect through the Mineralocorticoid Receptor (MR) and the Glucocorticoid Receptor (GR). Recently, several polymorphisms of both the MR and GR have been found to be associated with dysregulation of the HPA-axis and with mood disorders.

#### Objective of the study:

Its aim is to evaluate the effect of genotypes on symptoms, neurocognitive functioning and course of the illness. A smaller subgroup of the cross-sectionally assessed patients and their siblings will be evaluated for relations between deficits in attention and memory, HPA-axis functioning and polymorphisms. The results of this research will be highly relevant in understanding the relation between stress and psychopathology, and give impetus to new forms of therapy.

#### Study design:

This study consists of both a cross-sectional and prospective approach including 300 patients with bipolar disorder. In the cross-sectional approach, all patients and healthy volunteers will be interviewed and neurocognitively tested to define phenotype and endophenotype; a blood sample will be taken to analyse genotypes of cortisol receptors. A subgroup patients with the ER22/23EK polymorphism and the 9beta polymorphism of the Glucocorticoid Receptor and their first degree relatives will be extensively studied for neurocognitive functioning by the Testbatterie fur Aufmerksamkeitsprufung (TAP), cortisol levels through a Dexamethason Suppression Test, and clinical symptoms through the Mini International Neuropsychiatric Interview (MINI) and the Symptom Checklist.

In the prospective approach all patients will be followed for three years to monitor course of the illness through the Life Chart Method, the Social Support List and Serious Life Event Scale.

#### Study population:

Study population: The study population consists of 300 patients with bipolar disorder. Patients with a schizo-affective disorder are excluded. All patients are older than 18. A group of 300 healthy volunteers will be used as control group.

Primary study parameters/outcome of the study:

Life Chart Method is the main outcome measure for the prospective approach, the SSL and SLE Scale are secondary outcome measures. In the cross sectional approach outcome measures will be neurocognitive functioning, defined by the Divided Attention Test, genotype and diagnosis, defined by the MINI. In the subgroup of patients and their first degree relatives primary outcome measures are the MINI and SCL, the TAP, cortisol levels and the genotypes.

Secundary study parameters/outcome of the study:

DST, Neurocognitive functioning.

Nature and extent of the burden and risks associated with participation, benefit and group relatedness:

Of all patients and healthy volunteers one blood sample is needed. This is in the patients group almost completed, as we studied the relation between genotypes and fenotype of bipolar disorder last year (number...). In the cross-sectional approach all patients need to come for an interview for about an hour to complete questionnaires and a short neurocognitive attention test. In the subgroup of patients and their first degree relatives fenotype will be defined by the Symptom Checklist and the MINI, endophenotype will be studied by.

In the prospective study all patients will have to come every three months for an interview of about 15 minutes, as much as possible combines with their regular appointments with their clinician. They have to fill in 2 questionnaires and the life chart, together with a research nurse. After that the life chart will be also therapeutically used during the appointment with the clinician.

#### Doel van het onderzoek

Stress vulnerability as reflected by cortisolreceptor gene polymorphisms, influences course of bipolar disorder defined by number of episodes, physical health and cognitive functioning.

#### **Onderzoeksopzet**

Every 3 months during 2 years.

#### Onderzoeksproduct en/of interventie

N/A

# Contactpersonen

#### **Publiek**

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#### Wetenschappelijk

Lijnbaan 4 A.T. Spijker Den Haag 2512 VA The Netherlands +31 (0)70 3916300

# **Deelname** eisen

# Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- 1. Bipolar Disorder;
- 2. Older than 18 years.

# Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

Schizoaffective disorder.

4 - Influence of stress vulnerability on type and course of bipolar disorder. 5-05-2025

# **Onderzoeksopzet**

#### **Opzet**

Type: Observationeel onderzoek, zonder invasieve metingen

Onderzoeksmodel: Parallel

Toewijzing: Niet-gerandomiseerd

Controle: N.v.t. / onbekend

#### **Deelname**

Nederland

Status: Werving gestopt

(Verwachte) startdatum: 01-03-2008

Aantal proefpersonen: 200

Type: Werkelijke startdatum

# **Ethische beoordeling**

Positief advies

Datum: 26-07-2010

Soort: Eerste indiening

# **Registraties**

# Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

## Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

## In overige registers

Register ID

NTR-new NL2323 NTR-old NTR2429

Ander register ABR / CCMO : 18286 / NL18286.097.07 ; ISRCTN ISRCTN wordt niet meer aangevraagd.

# Resultaten

#### Samenvatting resultaten

Functional polymorphism of the glucocorticoid receptor gene associates with mania and hypomania in bipolar disorder; Bipolar Disorders 2009: 11: 95–101