

Changes in plasma and platelet Brain-Derived Neurotrophic Factor (BDNF) levels induced by S-citalopram in major depression

Submission date 17/05/2010	Recruitment status No longer recruiting	☐ Prospectively registered
Registration date 23/06/2010	Overall study status Completed	☐ Protocol
Last Edited 23/06/2010	Condition category Mental and Behavioural Disorders	☐ Statistical analysis plan
		☐ Results
		☐ Individual participant data
		☐ 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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Spain

08500

Additional identifiers

Protocol serial number

1

Study information

Scientific Title

Utility of serum and platelet levels of Brain- Derived Neurotrophic Factor (BDNF) like biological marker of treatment response in major depression: a longitudinal controlled trial

Acronym

BDNF

Study objectives

1. BDNF levels in depressed patients are lower than in healthy controls in platelet poor plasma and in platelets
2. 8 and 24 weeks treatment with S-citalopram normalize BDNF levels to be similar to healthy controls

Ethics approval required

Old ethics approval format

Ethics approval(s)

The Ethics Committee of the Hospital Clinic of Barcelona approved in March 2005

Primary study design

Interventional

Study design

Longitudinal controlled study for 6 months

Study type(s)

Not Specified

Health condition(s) or problem(s) studied

Major depression

Interventions

Patients group:

After the baseline assessments and baseline blood samples were obtained, all patients were given S-citalopram orally as an antidepressant therapy. Beginning with 5 mg/day for 4 days, and increased to 10 mg/day in the fifth day. In the following visits, the psychiatrist increased the doses as required up to a maximum of 40 mg/day. We used elevated doses based on severity of clinical depression and on personal experience. One doses per day. The duration of follow-up was 6 months.

Healthy controls:

Assessments at baseline and no treatment.

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

S-citalopram

Primary outcome(s)

BDNF levels in platelets and plasma, measured at baseline, 8 and 24 weeks of treatment in the patient group, once in the control group

Key secondary outcome(s)

1. Severity of depression was assessed using the 17-item Hamilton Depression Rating Scale (HDRS)
2. Cognitive performance, assessed by:
 - 2.1. Wechsler Adult Intelligence Scale (WAIS-III): Vocabulary, Buckets of Kohs, numerical key similitudes
 - 2.2. Wechsler Memory Scale (WMS-III): Digits, Verbal Memory I, Verbal Memory II
 - 2.3. Train Making Test (TMT) part A and B
 - 2.4. Auditory Verbal Learning Test (AVLT de Rey) (Rey 1964)
 - 2.5. Stroop Color and Word Test
 - 2.6. Wisconsin Card Sorting Test (WCST)
3. Quality of life scales:
 - 3.1. Social Adaptation Self-evaluation Scalen (SASS)
 - 3.2. Perceived Stress Scale (PSS)
 - 3.3. Quality of Life in Depression Scale (QLDS)
4. Personality, assessed by Eysenck Personality Questionnaire (EPQ)

Clinical assessments were conducted at baseline, 2, 4, 8, 12, 16, 20 and 24 weeks of treatment, once in the control group.

Completion date

31/12/2007

Eligibility

Key inclusion criteria

1. Patient group:
 - 1.1. Patients suffering from a current major depressive episode, single episode or recurrent, diagnosed according to Diagnostic and Statistical Manual for Mental Disorders Criteria
 - 1.2. A 17-item Hamilton Depression Rating Scale (HDRS) total score of 18 or higher.
 - 1.3. Aged between 18 and 65 years
2. Control group:
 - 2.1. Healthy subjects with no history of chronic physical illness, substance abuse or mental diseases and not taking regular medications in the last month were recruited
 - 2.2. Free of chronic and acute physical illness within the 2 weeks before the study
 - 2.3. Aged between 18 and 65 years
3. Written information was given and written informed consent was obtained from each patient to participate

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 Years

Sex

All

Key exclusion criteria**1. Patient group:**

1.1. Presence of other major axis I disorders, including schizophrenia, bipolar disorders, anxiety disorders, substance-related disorders and eating disorders

1.2. Presence of any acute physical disorders and/or exposure to any psychotropic drugs in the last month

2. Control group

2.1. History of chronic physical illness, substance abuse or mental diseases or taking regular medications in the last month

2.2. Free of chronic and acute physical illness within the 2 weeks before the study

Date of first enrolment

01/07/2005

Date of final enrolment

31/12/2007

Locations**Countries of recruitment**

Spain

Study participating centre

Canigó 51, 6B

Vic

Spain

08500

Sponsor information**Organisation**

Hospital Clinic of Barcelona (Hospital Clínic de Barcelona) (Spain)

ROR

<https://ror.org/02a2kzf50>

Funder(s)**Funder type**

Hospital/treatment centre

Funder Name

Hospital Clinic of Barcelona (Beca fi de residència Hospital Clínica) (Spain) - Grant

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration