Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

Comparative Study of Brain-Derived Neurotrophic Factor in Depressive patients in treatment with Electro Convulsive Therapy and antidepressant

Protocol summary

Summary

This was a double-blind clinical trial as a comparative study to evaluate the serum level of brain-derived neurotrophic factor in patients with unipolar major depressive disorder treated with electroconvulsive and antidepressants who have been admitted in one of the psychiatric wards of Farshchian Hospital, Hamadan. In this study, there are 40 admitted patients at the age of 18-40 years who have no systemic disease and no illegal substance abuse; they will be enrolled in the study with informed consent and will be divided into two groups based on randomized blocks. The case study will undergo electroconvulsive treatment and the other group will be treated with antidepressants. Before the treatment and fourth week after it, Beck's Depression Inventory (BDI) will be completed by all the patients and patients' blood samples will also be collected in a similar method to measure the serum level of brain-derived neurotrophic factor. Their factor rate and depression intensity will be monitored too.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201207041743N8**
Registration date: **2012-07-15, 1391/04/25**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2012-07-15, 1391/04/25

Registrant information

Name

Mohammad Haghighi

Name of organization / entity

Research Center for Behavioral Disorders and Substance Abuse, Hamadan University of Medical Sciences

Country

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Recruitment status

Recruitment complete

Funding source

Hamadan University of Medical Sciences

Expected recruitment start date

2012-07-05, 1391/04/15

Expected recruitment end date

2012-09-21, 1391/06/31

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparative Study of Brain-Derived Neurotrophic Factor in Depressive patients in treatment with Electro Convulsive Therapy and antidepressant

Public title

Brain-Derived Neurotrophic Factor in Depressive patients

Purpose

Health service research

Inclusion/Exclusion criteria

Inclusive Criteria 1. Patients with unipolar major depressive disorder admitted in one of the psychiatric wards of Farshchian Hospital 2. Aged of 18-40 years 3. No systemic diseases such as diabetes, hypertension, epilepsy and etc 4. No history of alcohol abuse or other illegal substances 5. Patient's informed consent

Exclusive Criteria 1. Incidence of uncontrollable somatic condition 2. Patient’s unwillingness to continue participation

Age
From **18 years** old to **40 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **40**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Double blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Hamadan University of Medical Sciences

Street address
Fahmideh str.Hamadan

City
Hamadan

Postal code

Approval date
2012-07-03, 1391/04/13

Ethics committee reference number
1215/9/35/16/د/پ

Health conditions studied

1

Description of health condition studied
Major Depressive Disorder

ICD-10 code
F32

ICD-10 code description
Depressive episode

Primary outcomes

1

Description
Severity of symptoms of Depression

Timepoint
Baseline and 4 weeks after treatment

Method of measurement
Beck Depression scale

2

Description
level of Brain-derived neurotrophic factor in serum

Timepoint
Baseline and 4 weeks after treatment

Method of measurement
ELISA

Secondary outcomes

empty

Intervention groups

1

Description
Electero Convulsive Therapy

Category
Treatment - Other

2

Description
Antidepressant drugs

Category
Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center
Farshchian Hospital

Full name of responsible person
Mohammad Haghighi

Street address
Farshchian Hospital

City
Hamadan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Research center for behavioral disorders and substance abuse, Hamadan university of medical sciences

Full name of responsible person

Dr.Mohammad Ahmadpanah

Street address

honarestan Str.

City

Hamadan

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Research center for behavioral disorders and substance abuse, Hamadan university of medical sciences

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

empty

Person responsible for general inquiries

Contact

Name of organization / entity

Hamadan University of Medical Sciences

Full name of responsible person

Mohammad Haghighi

Position

Assistant

Other areas of specialty/work

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Person responsible for updating data

Contact

Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty