

Clinical Trial Protocol

Iranian Registry of Clinical Trials

09 Jul 2026

Evaluation of the effect of the synchronised exercise and electroconvulsive therapy on serum brain neurotherapeutic factor in drug resistance depressive patient

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+antidepressant, exercises +antidepressant and antidepressants only who have been admitted in one of the psychiatric wards of Farshchian Hospital, Hamadan. In this study, there are 60 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 3 groups based on randomized blocks. The first group will undergo electroconvulsive+ antidepressant, second group exercise +antidepressant, and other antidepressant only. Before the treatment and fourth week after it Hamilton depression Rating scale 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: **IRCT201312271743N12**
Registration date: **2014-01-07, 1392/10/17**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2014-01-07, 1392/10/17

Registrant information

Name

Mohammad Haghghi

Name of organization / entity

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

Country

Iran (Islamic Republic of)

Phone

+98 81 1827 4184

Email address

haghghi@umsha.ac.ir

Recruitment status

Recruitment complete

Funding source

Hamadan University of Medical Sciences

Expected recruitment start date

2013-01-01, 1391/10/12

Expected recruitment end date

2013-06-01, 1392/03/11

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation of the effect of the synchronised exercise and electroconvulsive therapy on serum brain neurotherapeutic factor in drug resistance depressive patient

Public title

Brain-Derived Neurotrophic Factor level 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: **60**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

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.

City

Hamadan

Postal code

Approval date

2009-05-05, 1388/02/15

Ethics committee reference number

18366/9/35/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

Hamiltone 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+ antidepressant drug

Category

Treatment - Drugs

2

Description

exercise +antidepressant

Category

Treatment - Drugs

3

Description

Antidepressant drug

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Farshchian Hospital

Full name of responsible person

Mohammad Haghghi

Street address

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

Mohammad Haghighi

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**

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

Full name of responsible person

Mohammad Haghighi

Position

Associate professor

Other areas of specialty/work**Street address**

Honarestan Str.

City

Hamadan

Postal code**Phone**

+98 81 1827 1066

Fax**Email**

haghighi@umsha.ac.ir

Web page address

Person responsible for scientific

inquiries

Contact**Name of organization / entity**

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

Full name of responsible person

Mohammad Haghighi

Position

Associate professor

Other areas of specialty/work**Street address**

Honarestan Str

City

Hamadan

Postal code**Phone**

+98 81 1827 1066

Fax**Email**

haghighi@umsha.ac.ir

Web page address

Person responsible for updating data

Contact**Name of organization / entity**

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

Full name of responsible person

Mohammad Haghighi

Position

Associate professor

Other areas of specialty/work**Street address****City****Postal code****Phone**

00

Fax**Email****Web page address**

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