

Clinical Trial Protocol

Iranian Registry of Clinical Trials

17 Sep 2026

Comparison of the efficacy of electroconvulsive therapy and repetitive transcranial magnetic stimulation

Protocol summary

Summary

There are contradictory reports regarding the antidepressant effects of repetitive transcranial magnetic stimulation. This study is a randomized, electroconvulsive therapy controlled, parallel group clinical trial comparing antidepressant effects of electroconvulsive therapy and repetitive transcranial magnetic stimulation in patients with major depressive disorder diagnosed according to clinical interview using DSM-IV criteria. Patients with each of the following items will be excluded: bipolar mood disorder, serious medical conditions, suicidal attempt, and the lack of patients' consent. Beck depression inventory and Hamilton depression rating scales are used to measure depression score as the main outcome.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138902253930N1**

Registration date: **2010-11-24, 1389/09/03**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2010-11-24, 1389/09/03

Registrant information

Name

Ahmad Ghanizadeh

Name of organization / entity

Research Center for Psychiatry and Behavioral Sciences, Shiraz University Of Medical Sciences

Country

Iran (Islamic Republic of)

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+98 71 1627 3070

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ghanizad@sina.tums.ac.ir

Recruitment status

Recruitment complete

Funding source

Shiraz University of Medical Sciences.

Expected recruitment start date

2010-06-02, 1389/03/12

Expected recruitment end date

2010-12-03, 1389/09/12

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the efficacy of electroconvulsive therapy and repetitive transcranial magnetic stimulation

Public title

Comparison of the efficacy of electroconvulsive therapy and repetitive transcranial magnetic stimulation on Major depressive disorder

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion: 1- major depressive disorder, 2- age>20, 3- voluntary participation. Exclusion: 1-bipolar mood disorder, 2- serious medical conditions, 3- suicidal attempt, 4- lack of consent.

Age

From **19 years** old to **65 years** old

Gender

Both

Phase

1

Groups that have been masked

No information

Sample size

Target sample size: 60

Randomization (investigator's opinion)

Randomized

Randomization description**Blinding (investigator's opinion)**

Not blinded

Blinding description**Placebo**

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Shiraz University of Medical Sciences

Street address

Shiraz- Chamran street- Hafez hospital

City

Shiraz

Postal code

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Approval date

2010-06-02, 1389/03/12

Ethics committee reference number

CT-89-5091

Health conditions studied**1****Description of health condition studied**

major depressive Disorder

ICD-10 code

F32

ICD-10 code description

Depressive episode

2**Description of health condition studied**

Recurrent depressive disorder

ICD-10 code

F33

ICD-10 code description

Recurrent depressive disorder

Primary outcomes**1****Description**

Depression score

Timepoint

before and after 10 sessions of intervention

Method of measurement

Questionnaire

Secondary outcomes

empty

Intervention groups**1****Description**

The patients in electroconvulsive therapy group receive 10 sessions (3 days per week). There are 3 sessions of electroconvulsive therapy in each week for each patient

Category

Treatment - Other

2**Description**

The patients in repetitive transcranial magnetic stimulation group receive repetitive transcranial magnetic stimulation daily for 10 days (Saturday to Wednesday). Each session is 10 minutes with a large figure of eight coil

Category

Treatment - Other

Recruitment centers**1****Recruitment center****Name of recruitment center**

Research Center for Psychiatry and behavioral sciences

Full name of responsible person

Mitra Keshtkar

Street address

Shiraz- Chamran Street- Hafez hospital

City

Shiraz

Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Shiraz University of Medical Sciences

Full name of responsible person

Mohammad Hossien Dabbaghmanesh

Street address

Zand Street- Shiraz University of Medical sciences- Vice-chancellery of Research Affairs

City
Shiraz
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Shiraz 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

Person responsible for scientific inquiries

Contact

Name of organization / entity
Shiraz University of Medical sciences
Full name of responsible person
Ahmad Ghanizadeh
Position

MD
Other areas of specialty/work
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Web page address

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