Clinical Trial Protocol
Iranian Registry of Clinical Trials

30 Oct 2026

Evaluation of liothyronine efficacy add to ECT on response to treatment and memory impairment of patients with major depressive disorder

Protocol summary

Summary

This study aims to measure the effect of liothyronin on mood and alertness of patients with major depression who receive ECT. A total of fifty patients with major depression based on DSMIV who are candidate to treat with ECT and are between 18 to 60 years were included into the study and after exclusion of patients with severe cardiac disease, thyroid problems, and organic brain diseases, and those with pregnancy and addiction, the patients were randomly assigned into intervention or control group. Both group; receive six sessions of the standard bilateral ECT. One day before the start of the ECT, the patients in the intervention group receive 50 microgram liothyronin, daily, until the end of sixth ECT. The patients in the control group receive placebo over this period. Mood condition will be measured by using Hamilton test and Wechsler test is used to measure alertness, before treatment, after the third ECT, and after the sixth ECT. The results will be compared between the two groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201011075127N1**
Registration date: **2011-01-14, 1389/10/24**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2011-01-14, 1389/10/24

Registrant information

Name

Abbas Masoudzadeh

Name of organization / entity

Zare hospital, Mazandaran University of Medical Sciense,

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Recruitment status

Recruitment complete

Funding source

Psychiatry and Behavioral Sciences Research Center of Mazandaran University of Medical Sciences

Expected recruitment start date

2010-12-22, 1389/10/01

Expected recruitment end date

2011-05-22, 1390/03/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation of liothyronine efficacy add to ECT on response to treatment and memory impairment of patients with major depressive disorder

Public title

The effect of liothyronin on electeroconvulsive therapy in treatment of depression

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: MMD patients according to DSM IV-TR, presence of indication of ECT diagnosed by a psychiatrist, signing the informed consent Exclusion criteria: pregnancy, severe cardiac disease, thyroid dysfunction, failure to follow up

Age
From **20 years** old to **60 years** old
Gender
Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **30**
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
Ethics committee of Mazandaran University of Medical Sciense
Street address
Moallem Square
City
Sari
Postal code
Approval date
2010-11-24, 1389/09/03
Ethics committee reference number
87-103

Health conditions studied

1

Description of health condition studied
severe depressive episode without psychotic symptoms
ICD-10 code
F32.2
ICD-10 code description
Severe depressive episode without psychotic symptoms

2

Description of health condition studied
Severe depressive episode with psychotic symptoms
ICD-10 code
F32.3
ICD-10 code description
Severe depressive episode with psychotic symptoms

Primary outcomes

1

Description
cognitive change
Timepoint
before treatment, after the third ECT, and after the sixth ECT
Method of measurement
wechsler test

Secondary outcomes

1

Description
mood change
Timepoint
before treatment, after the third ECT, and after the sixth ECT
Method of measurement
hamilton test

Intervention groups

1

Description
Six sessions of the standard bilateral ECT as well as 50 microgram liothyronin, daily, since a day before the start of the ECT until the end of sixth ECT
Category
Treatment - Drugs

2

Description
Six sessions of the standard bilateral ECT as well as placebo, daily, since a day before the start of the ECT until the end of sixth ECT
Category
Placebo

Recruitment centers

1

Recruitment center
Name of recruitment center
Zare Burns and Psychiatric Hospital
Full name of responsible person
Dr Mahdi Poorasghar
Street address
Neka road
City
Sari

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Psychiatry and Behavioral Sciences Research Center of Mazandaran University of Medical Sciences
Full name of responsible person
Dr.Farnia
Street address
Zare hospital, Neka road
City
Sari
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Psychiatry and Behavioral Sciences Research Center of Mazandaran 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
Psychiatry and Behavioral Sciences Research Center of Mazandaran University of Medical Sciences
Full name of responsible person
Dr. Seyyed Taha Yahyavi
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psychiatrist, Assistant Professor
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Person responsible for updating data

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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