

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Comparison of Etomidate and Sodium Thiopental in anesthesia induction in Electroconvulsive therapy

Protocol summary

Summary

While the therapeutic effects of electroconvulsive therapy (ECT) on major depressive disorder is widely investigated, there is a gap in literature regarding the possible effects of the medications used for induction of anesthesia in ECT. To the best of authors' knowledge, this study is the first randomized double blind clinical trial compares the effect of etomidate and sodium thiopental on the depression symptoms in patients administered ECT. The participants of this study are sixty adult patients with major depressive disorder who were referred for taking ECT. They were randomly allocated into one of the two groups. One group received etomidate and the other group received sodium thiopental as medication for induction of anesthesia. All the patents received similar bilateral ECT. The outcomes were Beck Depression Inventory (BDI) score, seizure duration, and recovery duration after induction of anesthesia.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201104123468N6**

Registration date: **2011-04-27, 1390/02/07**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2011-04-27, 1390/02/07

Registrant information

Name

Mohammad Reza Hajiesmaeili

Name of organization / entity

Tehran University of Medical Sciences

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Deputy of research, Shahid Sadoughi University of medical science and health services, Yazd, Iran.

Expected recruitment start date

2009-01-01, 1387/10/12

Expected recruitment end date

2009-03-15, 1387/12/25

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of Etomidate and Sodium Thiopental in anesthesia induction in Electroconvulsive therapy

Public title

Anesthesia induction in Electroconvulsive therapy for major depressive disorder

Purpose

Supportive

Inclusion/Exclusion criteria

inclusion criteria: Adult major depressive psychiatric patients 18-50 years ASA=I,II, referred by psychiatrist to take ECT exclusion criteria: discontinue study protocole

Age

From **18 years** old to **50 years** old

Gender

Both

Phase

2-3

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

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Shahid Sadoughi University of Medical Sciences and health services

Street address

deputy of research- shahid bahonar square-yazd-iran

City

Yazd

Postal code

Approval date

2008-11-21, 1387/09/01

Ethics committee reference number

1738

Health conditions studied

1

Description of health condition studied

Recurrent depressive disorder

ICD-10 code

F33

ICD-10 code description

Recurrent depressive disorder

Primary outcomes

1

Description

Depression

Timepoint

after 6 sessions of ECT

Method of measurement

Beck Depression Inventory (BDI) score

Secondary outcomes

1

Description

seizure duration

Timepoint

each session

Method of measurement

second

2

Description

Recovery duration

Timepoint

each session

Method of measurement

minute

3

Description

side effects

Timepoint

each session

Method of measurement

observation

Intervention groups

1

Description

A group received intravenous sodium thiopental (2.5%, 3mg/kg) . All the patients in both groups received 6 sessions similar bitemporal ECT.

Category

Treatment - Other

2

Description

in second group, patients received 0/2 mg/kg etomidate for anesthesia induction and they received ECT for 6 sessions.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Psychiatry Hospital

Full name of responsible person

Ghasem Dastgerdi

Street address

Psychiatry Hospital

City

Taft

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shahid Sadoughi University of Medical Sciences

Full name of responsible person

Hassan Mozaffari Khosravi

Street address

Shahid Sadoughi University of Medical Sciences

City

Yazd

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Shahid Sadoughi 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

Shahid Sadoughi University of Medical Sciences

Full name of responsible person

Mohammad Hassan Abdollahi

Position

assistant professor of anesthesiology

Other areas of specialty/work

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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