Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 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

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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
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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

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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