

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

08 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)

##### Phone

00983516227747-00983517232422

##### Email address

hajiesmaeili@ssu.ac.ir

##### 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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Afshar Hospital- Yazd- Iran

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## Person responsible for scientific inquiries

### Contact

### Name of organization / entity

Research Center for Psychiatry and Behavioral Sciences, Department of Psychiatry, Hafez Hospital, Sh

### Full name of responsible person

Ahmad Ghanizadeh

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associated professor

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### Street address

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## Person responsible for updating data

### Contact

**Name of organization / entity**

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Mohammad Reza Haji Esmaeili

**Position**

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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*