

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

25 Jun 2026

### Early cognitive function after Sevoflurane and Propofol anesthesia in 55-65 years old patients

#### Protocol summary

##### Summary

This study compared the effects of sevoflurane and propofol anesthesia on early cognitive function in patients 55 to 65 years old who are undergoing surgery should be done. A total of 60 patients (two groups of 30) 65 to 55 years, ASA class 2-1 have the characteristics of the study population are examined in this study. Patients 12 hours before surgery in terms of cognitive function were assessed by MMSE test score is given. After infusion of the anesthetic propofol to maintain anesthesia in group 1 dose of 200-100 micrograms / kg / min is used. The second group of patients with established Anesthesia sevofluran gas flow rate of 100% oxygen will 1MAC. 12 patients after -24-48 hours after surgery in terms of cognitive impairment with MMSE tests are evaluated and compared with before anesthesia 200-100 micrograms / kg / min in group 1. maintenance of anesthesia Patients in the second group would be sevofluran gas flow rate of 1MAC . the patients after 12 -24-48 hours after the operation are evaluated in terms of cognitive impairment with MMSE tests and compared with before anesthesia.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2012102211209N1**

Registration date: **2013-02-02, 1391/11/14**

Registration timing: **registered\_while\_recruiting**

Last update:

Update count: **0**

##### Registration date

2013-02-02, 1391/11/14

##### Registrant information

**Name**

Parviz Kheirkhah

##### Name of organization / entity

Kashan University of Medical Sciences

##### Country

Iran (Islamic Republic of)

##### Phone

+98 36 1445 9802

##### Email address

parvizkheirkhah@kaums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

Kashan University of Medical Sciences

##### Expected recruitment start date

2012-10-29, 1391/08/08

##### Expected recruitment end date

2013-04-28, 1392/02/08

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Early cognitive function after Sevoflurane and Propofol anesthesia in 55-65 years old patients

##### Public title

Early cognitive function after Sevoflurane and Propofol anesthesia in 55-65 years old patients

##### Purpose

Prevention

##### Inclusion/Exclusion criteria

Inclusion criteria: patients needs elective abdominal Hernia surgery with ASA class 1 and 2 longed 1 to 4 hours. exclusion criteria:patients with emergency surgery ; ASA class 3 and 4;history of known Psychology;History of cardiovascular disease;Stroke; High intracranial pressure; Traumatic brain injury in the

past 12 months; Addiction to Alcohol; Substance Abuse; Sensitivity to anesthetic drugs And unwillingness to participate in the study

#### Age

From **55 years** old to **65 years** old

#### Gender

Both

#### Phase

N/A

#### Groups that have been masked

*No information*

#### Sample size

Target sample size: **60**

#### Randomization (investigator's opinion)

N/A

#### 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

Kashan University Of Medical Sciences

##### Street address

5th Km of Ghotbe Ravandi Bulv.

##### City

Kashan

##### Postal code

#### Approval date

2012-10-09, 1391/07/18

#### Ethics committee reference number

29/5/1/2740/پ

## Health conditions studied

### 1

#### Description of health condition studied

Cognitive disorder

#### ICD-10 code

(F00-F99)

#### ICD-10 code description

disorders of psychological development

## Primary outcomes

### 1

#### Description

Attention

#### Timepoint

48-24-12 hours later, 12 hours before anesthesia

#### Method of measurement

MMSE TEST

### 2

#### Description

perception

#### Timepoint

48-24-12 hours later, 12 hours before anesthesia

#### Method of measurement

MMSE TEST

### 3

#### Description

Speech

#### Timepoint

48-24-12 hours later, 12 hours before anesthesia

#### Method of measurement

MMSE TEST

### 4

#### Description

Memory

#### Timepoint

48-24-12 hours later, 12 hours before anesthesia

#### Method of measurement

MMSE TEST

### 5

#### Description

Learning

#### Timepoint

48-24-12 hours later, 12 hours before anesthesia

#### Method of measurement

MMSE TEST

### 6

#### Description

Abstract thinking

#### Timepoint

48-24-12 hours later, 12 hours before anesthesia

#### Method of measurement

MMSE TEST

## Secondary outcomes

### 1

#### Description

Delirium

#### Timepoint

48-24-12 hours later, 12 hours before anesthesia

#### Method of measurement

MMSE TEST

## Intervention groups

1

### Description

Propofol 100-200 micrograms / kg / minute during the 1-3 hour surgery

### Category

Treatment - Drugs

2

### Description

During a 1-3 hour surgery with sevoflurane MAC1

### Category

Treatment - Drugs

## Recruitment centers

1

### Recruitment center

#### Name of recruitment center

Beheshti Hospital

#### Full name of responsible person

Parviz Kheirkhah

#### Street address

Beheshti Hospital,5th Kilometer Ghotbe Ravandi Bulv.

#### City

Kashan

## Sponsors / Funding sources

1

### Sponsor

#### Name of organization / entity

Kashan University Of Medical Sciences

#### Full name of responsible person

Dr. Gholam Ali Hamidi

#### Street address

Kashan University Of Medical Sciences, 5th Kilometer Ghotbe Ravandi Bulv

#### City

Kashan

### Grant name

### Grant code / Reference number

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

Yes

### Title of funding source

Kashan 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

Kashan University Of Medical Sciences

#### Full name of responsible person

Dr.Parviz Kheirkhah

#### Position

Resident in Anesthesiology

#### Other areas of specialty/work

#### Street address

Beheshti Hospital,5th Kilometer Ghotbe Ravandi Bulv.

#### City

Kashan

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#### Phone

+98 36 1533 0527

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parvizkheirkhah@yahoo.com

#### Web page address

## Person responsible for scientific inquiries

### Contact

#### Name of organization / entity

Kashan University Of Medical Sciences

#### Full name of responsible person

Dr.Mohammad Reza Fazel

#### Position

Anesthesiologist

#### Other areas of specialty/work

#### Street address

Beheshti Hospital,5th Kilometer Ravand Bulv.

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drmfazel@yahoo.com

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## Person responsible for updating data

### Contact

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Kashan University Of Medical Sciences

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Parviz Kheirkhah

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Resident in Anesthesiology

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**Email**

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**Web page address****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*