Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

Early cognitive function after Sevoflorane 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

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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 Sevoflorane and Propofol anesthesia in 55-65 years old patients

Public title

Early cognitive function after Sevoflorane 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.
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Kashan University Of Medical Sciences
Full name of responsible person
Dr. Gholam Ali Hamidi
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Kashan University Of Medical Sciences, 5th Kilometer Ghotbe Ravandi Bulv
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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
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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