

Clinical Trial Protocol

Iranian Registry of Clinical Trials

17 Sep 2026

Effect of general anesthesia on postoperative cognitive function: A clinical trial

Protocol summary

Study aim

Effect of general anesthesia on postoperative cognitive function

Design

This study included 100 patients with ASA I or II who were candidate for general anesthesia at Besat Hospital, Hamadan, Iran.

Settings and conduct

The study population will include the patients with ASA I or II referring to Besat Hospital, Hamadan, Iran. They will be under general anesthesia.

Participants/Inclusion and exclusion criteria

Inclusion criteria: 60 years of age or higher; ASA I or II candidates for surgery under general anesthesia.
Exclusion criteria: History of alcohol and sedative as well as anticonvulsant drug consumption, and drug abuse; general anesthesia contraindications (cardiac failure, acute renal failure, acute liver failure, respiratory failure, bleeding disorders, myocardial infarction within the previous 6 weeks, stroke within the previous 6 months, progressive neurological disorders).

Intervention groups

The intervention group will receive general anesthesia according to standard methods. The type of medications may not be the same in all cases, but they will be administered based on standard anesthetic techniques.

Main outcome variables

The amount and severity of postoperative cognitive dysfunction will be evaluated and compared before, immediately after, and 10 months after general anesthesia.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20190429043414N2**

Registration date: **2019-07-12, 1398/04/21**

Registration timing: **prospective**

Last update: **2019-07-12, 1398/04/21**

Update count: **0**

Registration date

2019-07-12, 1398/04/21

Registrant information

Name

Hossein Kimiaei Asadi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 81 3525 0182

Email address

kimiaeimd@umsha.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-07-23, 1398/05/01

Expected recruitment end date

2020-07-22, 1399/05/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of general anesthesia on postoperative cognitive function: A clinical trial

Public title

Effect of general anesthesia on cognitive function

Purpose

Other

Inclusion/Exclusion criteria

Inclusion criteria:

60 years of age or higher ASA I or II candidates for surgery under general anesthesia

Exclusion criteria:

History of alcohol consumption History of drug abuse consumption History of sedative drug consumption History of anticonvulsant drug consumption General anesthesia contraindications Cardiac failure Acute renal failure Acute liver failure Respiratory failure Bleeding disorders Myocardial infarction within the previous 6 weeks Stroke within the previous 6 months Progressive neurological disorders

Age

From **60 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **100**

Randomization (investigator's opinion)

N/A

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Single

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Hamadan University of Medical Sciences

Street address

Hamadan University of Medical Sciences, Ayatollah Kashani Boulevard, Khaje Rashid Cross Roads

City

Hamadan

Province

Hamadan

Postal code

6517838678

Approval date

2019-07-07, 1398/04/16

Ethics committee reference number

IR.UMSHA.REC.1398.308

Health conditions studied

1

Description of health condition studied

Postoperative cognitive dysfunction

ICD-10 code

F19

ICD-10 code description

Mental and behavioural disorders due to multiple drug use and use of other psychoactive substances

Primary outcomes

1

Description

The amount and severity of postoperative cognitive dysfunction

Timepoint

Before, immediately after, and 10 months after spinal anesthesia.

Method of measurement

Wechsler Memory Scale-III (WMS-III) and the Mini Mental State Examination (MMSE)

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: The intervention group will receive general anesthesia according to standard methods. The type of medications may not be the same in all cases, but they will be administered based on standard anesthetic techniques.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Besat Hospital

Full name of responsible person

Hossein Kimiaei Assadi

Street address

Besat Hospital, Shahid Motahari Boulevard, Resalat Square

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6514845471

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info.research@umsha.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Hamedan University of Medical Sciences

Full name of responsible person

Saeid Bashirian

Street address

Hamadan University of Medical Sciences, Ayatollah
Kashani Boulevard, Khaje Rashid Cross Roads

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64517669644

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Grant name

Grant code / Reference number

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

Yes

Title of funding source

Hamedan University of Medical Sciences

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

Hamedan University of Medical Sciences

Full name of responsible person

Hossein Kimiaei Assadi

Position

Associate Professor

Latest degree

Specialist

Other areas of specialty/work

Anesthesiology

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Full name of responsible person

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Position

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Latest degree

Specialist

Other areas of specialty/work

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Person responsible for updating data

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Name of organization / entity

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Full name of responsible person

Hossein Kimiaei Assadi

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Sharing plan**Deidentified Individual Participant Data Set (IPD)**

Yes - There is a plan to make this available

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Not applicable

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to

make this available

Title and more details about the data/document

The total data to be included are the primary and secondary effects to be shared.

When the data will become available and for how long

6 months after printing results

To whom data/document is available

Our data will only be available to researchers working in science center and university.

Under which criteria data/document could be used

Our data will be available for scholars working in science center and university.

From where data/document is obtainable

Hossein Kimiaei Assadiprovides the analysis code to the applicants via email: hkimiaeid@yahoo.com

What processes are involved for a request to access data/document

Data collection was done for 10 months, data were collected one month, statistical analysis of one month, information dissemination as a article six months.

Comments