

# 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

##### City

Hamadan

##### Province

Hamadan

##### Postal code

6514845471

##### Phone

+98 81 3265 0030

**Email**

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

**City**

Hamadan

**Province**

Hamadan

**Postal code**

64517669644

**Phone**

+98 81 3820 1506

**Email**

info.research@umsha.ac.ir

**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

**Street address**

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

**City**

Hamadan

**Province**

Hamadan

**Postal code**

6517838678

**Phone**

+98 81 3525 0182

**Email**

hkimiaeimd@yahoo.com

## Person responsible for scientific 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

**Street address**

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

**City**

Hamadan

**Province**

Hamadan

**Postal code**

6517838678

**Phone**

+98 81 3525 0182

**Email**

hkimiaeimd@yahoo.com

## Person responsible for updating data

**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

**Street address**

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

**City**

Hamadan

**Province**

Hamadan

**Postal code**

6517838678

**Phone**

+98 81 3525 0182

**Email**

hkimiaeid@yahoo.com

**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**