

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Survey of the effect of oral zolpidem on hemodynamic signs and the patients Equilibrium in Stereotaxic surgeries.

Protocol summary

Study aim

The aim of this study was to determine and compare the hemodynamic parameters (systolic and diastolic blood pressure; mean blood pressure; heart rate; O₂ saturation) and the patients equilibrium during the stereotaxic surgeries in two groups of receiving zolpidem and placebo.

Design

The clinical trial is randomized, with controlled group, without parallel double blind groups.

Settings and conduct

Participants of elective stereotaxic surgery patients are selected after evaluating entry and exit criteria and are randomly assigned to receive Placebo and Zolpidem . Hemodynamic indices are recorded at the basic time(1hour before surgery), before anesthesia induction, 1, 3, 5,10,15 min after anesthesia, in the time of patient enter and every 15 min to the recovery.

Participants/Inclusion and exclusion criteria

Age between 20 - 65 years old; patients who consent to the informed consent to participate; ASA cslas 1,2; Non-inclusion criteria: use of sedative drugs;addiction to Alcohol; allergic reaction to drug; Parkinsons disease; obstructive sleep apnea; patients who have bradycardia.

Intervention groups

The once group receive 10 mg tablet of zolpidem 1 hour before surgery, The second group receive one tablet of placebo 1 hour before surgery, and Induction of anesthesia with 0.05 mg/kg Midazolam, 2 microgram/Kg Fentanyl.

Main outcome variables

Systolic blood pressure; diastolic blood pressure; mean blood pressure; heart rate; saturation of O₂.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20110528006617N6**

Registration date: **2021-07-07, 1400/04/16**

Registration timing: **prospective**

Last update: **2021-07-07, 1400/04/16**

Update count: **0**

Registration date

2021-07-07, 1400/04/16

Registrant information

Name

Mehrdad Masoudifar

Name of organization / entity

Esfahan University of medical sciences

Country

Iran (Islamic Republic of)

Phone

+98 31 1268 2007

Email address

masoudifar@med.mui.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-07-10, 1400/04/19

Expected recruitment end date

2021-08-22, 1400/05/31

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Survey of the effect of oral zolpidem on hemodynamic signs and the patients Equilibrium in Stereotaxic surgeries.

Public title

The effect of oral zolpidem on hemodynamic indices and the patients Equilibrium in Stereotaxic surgeries.

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Age between 20 - 65 years old Patients who consent to the informed consent to participate in the study ASA class 1,2

Exclusion criteria:

Use of sedative drugs Addiction to Alcohol Allergic reaction to drug Parkinsons disease Obstructive sleep apnea Patients who have bradycardia

Age

From **20 years** old to **65 years** old

Gender

Both

Phase

3

Groups that have been masked

- Participant
- Outcome assessor

Sample size

Target sample size: **64**

Randomization (investigator's opinion)

Randomized

Randomization description

Random function "Random Number Generation " of Excel software based on patient file number will be used for randomization. Patients file number were entered into Excel program and patients were divided into case and control groups based on the random button. In total, there were two groups of 64 people. In this case, the file number is entered in Excel program, then a random number is selected from the data analysis command. This study has 2 groups that can be numbered from 1 to 2, respectively. We also want 32 people in each group. As a result, sequences 1 to 2 should be repeated 32 times each time. It is clear that the repetition of each number occurs once in each group, so select 1 for repeating each number and 32 for repeating the sequence. In this way, 64 units will be produced.

Blinding (investigator's opinion)

Double blinded

Blinding description

We produced tablet similar to Zolpidem, The once group received one tablet of Zolpidem 1 hour before surgery and the second group received one tablet of Placebo 1 hour before surgery. So the patients do not have any information about the intervention and the person who registered the information do not know which patient in which group is and the study has two blind side.

Placebo

Used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ethics committee of Isfahan University of Medical sciences

Street address

Isfahan University Of Medical Science, Hezar Jarib Ave

City

Isfahan

Province

Isfahan

Postal code

7346181746

Approval date

2020-10-26, 1399/08/05

Ethics committee reference number

IR.MUI.MED.REC.1399.655

Health conditions studied**1****Description of health condition studied**

General anesthesia

ICD-10 code

T88.5

ICD-10 code description

Other complications of anesthesia

Primary outcomes**1****Description**

Systolic blood pressure

Timepoint

Basic time(one hours before surgery), before anesthesia induction, 1,3,5,10,15 min after anesthesia, in the time of patient enter to the recovery and every 15 min time of patient enter to the recovery.

Method of measurement

Mm-hg, sphygmomanometer

2**Description**

Diastolic blood pressure

Timepoint

Basic time(one hours before surgery), before anesthesia induction, 1,3,5,10,15 min after anesthesia, in the time of patient enter to the recovery and every 15 min time of patient enter to the recovery.

Method of measurement

Mm-hg, sphygmomanometer

3

Description

Heart rate

Timepoint

Basic time(one hours before surgery), before anesthesia induction, 1,3,5,10,15 min after anesthesia, in the time of patient enter to the recovery and every 15 min time of patient enter to the recovery

Method of measurement

ECG monitor

4

Description

Mean arterial pressure

Timepoint

Basic time(one hours before surgery), before anesthesia induction, 1,3,5,10,15 min after anesthesia, in the time of patient enter to the recovery and every 15 min time of patient enter to the recovery

Method of measurement

Mm-hg, sphygmomanometer

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Description

O2 saturation

Timepoint

Basic time(one hours before surgery), before anesthesia induction, 1,3,5,10,15 min after anesthesia, in the time of patient enter to the recovery and every 15 min time of patient enter to the recovery

Method of measurement

O2 saturation percentage , pulse oximeter device

6

Description

Surgeon Satisfaction

Timepoint

End of the surgery

Method of measurement

Likert Scale

7

Description

Patient Satisfaction

Timepoint

End of the surgery

Method of measurement

Likert Scale

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Initially, personal consent is obtained from the patients. This group receive 10 mg tablet of zolpidem 1 hour before surgery, Then the patient is placed on the operating bed and standard monitoring devices including pulse oximetry, capnography are attached and Induction of anesthesia with 0/05mg/kg Midazolam, 2 microgram/Kg Fentanyl .

Category

Treatment - Drugs

2

Description

Control group: Initially, personal consent is obtained from the patients. This group receive tablet of placebo 1 hour before surgery, Then the patient is placed on the operating bed and standard monitoring devices including pulse oximetry, capnography are attached and Induction of anesthesia with 0/05mg/kg Midazolam, 2 microgram/Kg Fentanyl .

Category

Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center

Alzahra hospital

Full name of responsible person

Mehrdad Masoudifar

Street address

Alzahra hospital, Sofe Blvd, Shahid Keshvari Highway

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alzahra@mui.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Esfahan University of Medical Sciences

Full name of responsible person

Shaghayegh Haghjoo Javanmard

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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

Esfahan 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**

Esfahan University of Medical Sciences

Full name of responsible person

Mehrdad Masoudifar

Position

Associate Professor

Latest degree

Subspecialist

Other areas of specialty/work

Anesthesiology

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Person responsible for scientific inquiries**Contact****Name of organization / entity**

Esfahan University of Medical Sciences

Full name of responsible person

Mehrdad Masoudifar

Position

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Person responsible for updating data**Contact****Name of organization / entity**

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Full name of responsible person

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Position

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

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

Study Protocol

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

Statistical Analysis Plan

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

Informed Consent Form

Undecided - It is not yet known if there will be 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