Clinical Trial Protocol
Iranian Registry of Clinical Trials

06 Jun 2026

Comparison the effect of ketamine and remifentanil on the level of Blood sugar during Laparoscopic Cholecystectomy

Protocol summary

Summary

This study is conducted to compare the effect of ketamine with remifentanil on the Blood sugar of patients undergoing laparoscopic cholecystectomy. In the present double blind clinical trial a total of 120 patients who refer for an elective cholecystectomy operation will be included in this study based on our inclusion and exclusion criteria.Randomly we will classify our patients to three groups. Group 1 will receive ketamine infusion with the dose of 10 µg/kg/min. We will infuse 1µg/kg/min remifentanil for patients in group 2 and group 3 will not receive neither drugs and will be our control group. General anesthesia will be induced for all groups with the same drug and will be continued with isoflurane. the level of blood sugar for each patients will be determined by glucometer before, after and every hour during operation.

General information

Acronym

None

IRCT registration information

IRCT registration number: **IRCT201701237745N5**

Registration date: **2017-05-16, 1396/02/26**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2017-05-16, 1396/02/26

Registrant information

Name

Afshin Mansourian

Name of organization / entity

YUMS

Country

Iran (Islamic Republic of)

Phone

+98 74 3322 0620

Email address

afshin.mansourian@yahoo.com

Recruitment status

Recruitment complete

Funding source

Yasuj University Of Medical Sciences

Expected recruitment start date

2015-01-24, 1393/11/04

Expected recruitment end date

2016-04-24, 1395/02/05

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison the effect of ketamine and remifentanil on the level of Blood sugar during Laparoscopic Cholecystectomy

Public title

The effect of ketamine and remifentanil on stress and level of blood sugar intra-operation

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: 20-70-year-old patients who undergo an elective cholecystectomy which takes at last 2 hours, patients must be categorized as class 1 according to American Society of Anesthesiologists Physical status Classification. Exclusion criteria: Diabetic patients, patients with cardiovascular diseases, Beta blocker consumption, hypo and hyperglycemic agents consumption, consuming dextrose solutions or sympathetic blocker agents during the operation,

intubation lasting more than 20 seconds

Age

From **20 years** old to **70 years** old

Gender

Both

Phase

3

Groups that have been masked

No information

Sample size

Target sample size: **120**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

In the current study we will use permuted block randomization with the block size of 8

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Yasuj University of medical sciences

Street address

Shahid Motehari biv.,vicechancellory of research and technology ,kohgiluyeh and boyerahmad

City

Yasuj

Postal code

Approval date

2017-02-01, 1395/11/13

Ethics committee reference number

IR.YUMS.REC.1395.199

Health conditions studied

1

Description of health condition studied

Cholelithiasis

ICD-10 code

K80.2

ICD-10 code description

Calculus of gallbladder without cholecystitis

2

Description of health condition studied

blood glucose

ICD-10 code

-R73.9

ICD-10 code description

-Hyperglycaemia, unspecified

3

Description of health condition studied

-

ICD-10 code

-

ICD-10 code description

-

Primary outcomes

1

Description

Blood Glucose

Timepoint

Immediately before and after induction of anesthesia and every hour after induction

Method of measurement

By using glucometer, milligrams per deciliter

Secondary outcomes

1

Description

-

Timepoint

-

Method of measurement

-

Intervention groups

1

Description

Group 1 will receive 10 µg/kg/min ketamine.

Category

Prevention

2

Description

Group 2 will receive 1 µg/kg/min remifentanil.

Category

Treatment - Drugs

3

Description

Control group will not receive neither ketamine nor remifentanil.

Category
Prevention

Recruitment centers

1

Recruitment center
Name of recruitment center
Shahid Beheshti Hospital
Full name of responsible person
Afshin Mansourian
Street address
Shahid Motehari Blv.
City
Yasuj

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Yasuj University of Medical Science
Full name of responsible person
Hossein Mari-oryad
Street address
Yasuj
City
Yasuj
Grant name
Grant code / Reference number
None
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Yasuj University of Medical Science
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
YUMS
Full name of responsible person
Afshin Mansourian
Position
Anesthesiologist/Assisstant professor
Other areas of specialty/work
Street address
Shahid Beheshti Hospital
City
Yasuj
Postal code
7591984117
Phone
+98 74 3322 0620
Fax
None
Email
afshin.mansourian@yahoo.com
Web page address
None

Person responsible for scientific inquiries

Contact
Name of organization / entity
YUMS
Full name of responsible person
Afshin Mansourian
Position
Assisstant professor/Anesthesiologist
Other areas of specialty/work
Street address
YUMS
City
Yasuj
Postal code
7591984117
Phone
+98 74 3322 0620
Fax
+98 74 3323 5153
Email
Afshin.mansourian@yahoo.com
Web page address
WWW.yamc.ac.ir

Person responsible for updating data

Contact
Name of organization / entity
YUMS
Full name of responsible person
Afshin Mansourian
Position
assisstent professor
Other areas of specialty/work
Street address
Shahid Beheshti Hospital
City
Yasuj
Postal code
76658909
Phone
+98 74 3322 0620
Fax
+98 74 3322 0620
Email
afshin.mansourian@yahoo.com
Web page address

None

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