

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jul 2026

Comparing the effect of dexmedetomidine and ketorolac to reduce post-surgery pain of patients with left lobectomy

Protocol summary

Study aim

Assess the level of pain control by Ketorolac vs
Dexmedetomidine after left lobectomy lung surgery

Design

This study is a randomized controlled trial, with 2 parallel groups. Patients are blinded about allocation to each of 2 intervention groups and are assigned to the mentioned groups using random number table.

Settings and conduct

In Ghaem hospital, patients of both sex, who need Left lobectomy surgery under general anesthesia, will be randomly divided into 2 groups, receiving Ketorolac or Dexmedetomidine. They will be blinded about allocation to each group.

Participants/Inclusion and exclusion criteria

Inclusion: age more than 18 years, Informed consent form must be signed, They were scheduled for Left lobectomy surgery under general anesthesia. Exclusion: History of allergy to our study drugs, History of renal or hepatic failure, History of PUD.

Intervention groups

Intervention group 1: Patients will receive Ketorolac, 30 mg every 6 hours as infusion. Intervention group 2: Patients will receive infusion of Dexmedetomidine, 1 microgram/kg/10 minutes as loading dose and 0.2 microgram/kg/h as maintenance.

Main outcome variables

Pain intensity

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20180521039753N1**

Registration date: **2018-05-27, 1397/03/06**

Registration timing: **registered_while_recruiting**

Last update: **2018-05-27, 1397/03/06**

Update count: **0**

Registration date

2018-05-27, 1397/03/06

Registrant information

Name

Seyed Iman Hashemi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 51 3840 0000

Email address

hashemipi941@mums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2018-05-22, 1397/03/01

Expected recruitment end date

2018-11-22, 1397/09/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparing the effect of dexmedetomidine and ketorolac to reduce post-surgery pain of patients with left lobectomy

Public title

Comparing the effect of dexmedetomidine and ketorolac to reduce post-surgery pain of lobectomy

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

age more than 18 years Informed consent form must be signed They were scheduled for Left lobectomy surgery under general anesthesia.

Exclusion criteria:

History of allergy to our study drugs History of renal or hepatic failure History of PUD

Age

From **18 years** old

Gender

Both

Phase

3

Groups that have been masked

- Participant

Sample size

Target sample size: **70**

Randomization (investigator's opinion)

Randomized

Randomization description

Using random number table, patients will be divided into two groups.

Blinding (investigator's opinion)

Single blinded

Blinding description

Patients are blinded about allocation to intervention group 1 (receiving Ketorolac after surgery) and intervention group 2 (receiving Dexmedetomidine after surgery).

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

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

Ethics committee of Mashhad University of Medical Sciences

Street address

Qoreishi Building, Daneshgah Street.

City

Mashhad

Province

Razavi Khorasan

Postal code

91388-13944

Approval date

2017-12-13, 1396/09/22

Ethics committee reference number

IR.MUMS.fm.REC.1396.583

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

Post-surgery pain

ICD-10 code

G89.18

ICD-10 code description

Other acute postprocedural pain

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

Pain intensity

Timepoint

Immediately after surgery and 2, 4, 6, 8, 12, 16, 20 and 24 hours after surgery

Method of measurement

Visual analogue scale

Secondary outcomes

empty

Intervention groups**1****Description**

Intervention group: Patients will receive Ketorolac, 30 mg every 6 hours as infusion.

Category

Treatment - Drugs

2**Description**

Intervention group: Patients will receive infusion of Dexmedetomidine, 1 microgram/kg/10 minutes as loading dose and 0.2 microgram/kg/h as maintenance.

Category

Treatment - Drugs

Recruitment centers**1****Recruitment center****Name of recruitment center**

Ghaem hospital

Full name of responsible person

Seyed Iman Hashemi

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Ahmad abad street.

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
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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
Mashhad 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
Mashhad University of Medical Sciences
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Resident
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

To protect the privacy of the participants in the study

Study Protocol

No - There is not a plan to make this available

Statistical Analysis Plan

No - There is not a plan to make this available

Informed Consent Form

No - There is not 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

Not applicable

Data Dictionary

Not applicable