

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

06 Jun 2026

### Comparison of the effect of intratracheal and intravenous lidocaine on bucking, cough, and emergence time at the end of anesthesia

#### Protocol summary

##### Summary

Airways responses to emergence from general anesthesia are common problems and can result in undesirable side effects, such as coughing, laryngospasm and hypertension. The aim of this study was to compare the effect of intratracheal and intravenous lidocaine on bucking, cough and emergence time at the end of anesthesia. Sixty ASA I-II patients received a standard anesthetic. Three minutes before the end of surgery, they were randomly allocated to receive either intravenous lidocaine 1.5mg/kg or intratracheal lidocaine 1.5mg/kg in a double-blind study. The number of bucking and coughs for each patient were continuously monitored for 30 min after extubation. Bucking and coughing were evaluated through a 3-point scale. Heart rate (HR) and Systolic and Diastolic blood pressures (SBP, DBP) were measured before and immediately after tracheal extubation. The emergence time also was recorded.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT138810223051N1**

Registration date: **2010-06-04, 1389/03/14**

Registration timing: **retrospective**

Last update:

Update count: **0**

##### Registration date

2010-06-04, 1389/03/14

##### Registrant information

##### Name

Marzieh Khezri

##### Name of organization / entity

Qazvine University of Medical Sciences

##### Country

Iran (Islamic Republic of)

##### Phone

+98 28 1223 6376

##### Email address

mkhezri@qums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

Qazvin University of Medical Sciences

##### Expected recruitment start date

2009-01-09, 1387/10/20

##### Expected recruitment end date

2009-06-10, 1388/03/20

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Comparison of the effect of intratracheal and intravenous lidocaine on bucking, cough, and emergence time at the end of anesthesia

##### Public title

Comparison of the effect of intratracheal and intravenous lidocaine on bucking, cough, and emergence time at the end of anesthesia

##### Purpose

Prevention

##### Inclusion/Exclusion criteria

Inclusion criteria: aged 18 to 60 years, scheduled for elective minor orthopedic surgery, lower abdominal surgery or gynecologic surgery Exclusion criteria: history of laryngeal or tracheal surgery or pathology, bronchial asthma, addiction and smoking., coexisting systemic illness increased intracranial pressure, severe cardiac disease, active upper respiratory tract infections,

increased risk for perioperative aspiration of gastric contents, combined epidural/general anesthetic techniques, consumption of cardiovascular medications such as ACE Inhibitors

#### Age

From **18 years** old to **60 years** old

#### Gender

Both

#### Phase

N/A

#### Groups that have been masked

*No information*

#### Sample size

Target sample size: **60**

#### Randomization (investigator's opinion)

Randomized

#### Randomization description

#### Blinding (investigator's opinion)

Double blinded

#### Blinding description

#### Placebo

Not used

#### Assignment

Parallel

#### Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Qazvin University of Medical Sciences

##### Street address

Shahid Bahonar Blvd.

##### City

Qazvin

##### Postal code

#### Approval date

2008-12-29, 1387/10/09

#### Ethics committee reference number

219

## Health conditions studied

### 1

#### Description of health condition studied

Airways responses to emergence from general anesthesia

#### ICD-10 code

Y55.7

#### ICD-10 code description

Anaesthetic, unspecified

### 2

#### Description of health condition studied

the emergence time

#### ICD-10 code

Y48.4

#### ICD-10 code description

Anaesthetic, unspecified

## Primary outcomes

### 1

#### Description

The number of bucking and coughs

#### Timepoint

before tracheal extubation and thirty minutes after extubation

#### Method of measurement

bucking and coughing were evaluated on a 3-point scale

### 2

#### Description

The emergence time

#### Timepoint

the time from discontinuation of drugs to extubation of patients at awake condition

#### Method of measurement

In minutes

## Secondary outcomes

### 1

#### Description

Heart rate (HR)

#### Timepoint

immediately after tracheal extubation

#### Method of measurement

with noninvasive monitoring

### 2

#### Description

Systolic blood pressure

#### Timepoint

immediately after tracheal extubation

#### Method of measurement

with noninvasive monitoring

### 3

#### Description

Diastolic blood pressure

#### Timepoint

immediately after tracheal extubation

#### Method of measurement

with noninvasive monitoring

## Intervention groups

## 1

### Description

intratracheal lidocaine 1.5 mg/kg

### Category

Prevention

## 2

### Description

intravenous lidocaine 1.5 mg/kg

### Category

Prevention

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Rajaei hospital

##### Full name of responsible person

Marzie-beigom Khezri

##### Street address

##### City

Qazvin

### 2

#### Recruitment center

##### Name of recruitment center

Kosar hospital

##### Full name of responsible person

##### Street address

##### City

Qazvin

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Qazvin University of Medical Sciences

##### Full name of responsible person

Marzie-beigom Khezri

##### Street address

Kosar Hospital

##### City

Qazvin

#### Grant name

#### Grant code / Reference number

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

Yes

#### Title of funding source

Qazvin University of Medical Sciences

#### 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

Qazvin University of Medical Sciences

#### Full name of responsible person

Marzieh-beigom Khezri

#### Position

Assistant professor of anesthesia

#### Other areas of specialty/work

#### Street address

Kosar Hospital,

#### City

Qazvin

#### Postal code

#### Phone

+98 28 1223 6375

#### Fax

#### Email

mkhezri@qums.ac.irmkhezri88@gmail.com

#### Web page address

## Person responsible for scientific inquiries

### Contact

#### Name of organization / entity

Qazvin University of Medical Sciences

#### Full name of responsible person

Marzieh-beigom Khezri

#### Position

Assistant professor of anesthesia

#### Other areas of specialty/work

#### Street address

Kosar Hospital

#### City

Qazvin

#### Postal code

#### Phone

+98 28 1223 6376

#### Fax

#### Email

mkhezri@qums.ac.irmkhezri88@gmail.com

#### Web page address

## Person responsible for updating data

### Contact

#### Name of organization / entity

Qazvin University of Medical Sciences

#### Full name of responsible person

Marzieh-beigom Khezri

#### Position

Assistant professor of anesthesia

#### Other areas of specialty/work

#### Street address

Kosar Hospita

**City**

Qazvin

**Postal code**

34188-99579

**Phone**

+98 28 1223 6375

**Fax**

+98 28 1223 6378

**Email**

mkhezri@qums.ac.ir

**Web page address**

**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*