

Clinical Trial Protocol

Iranian Registry of Clinical Trials

04 Jun 2026

Effects of adding intravenous lidocaine and morphine on pain of acute renal colic

Protocol summary

Summary

The aim of this randomized double-blind clinical trial is to compare of effects of intravenous lidocaine and morphine on acute renal colic pain. A total of 120 patients, meeting eligibility criteria, will be randomly allocated into two equal groups. In the intervention group 1.5 mg/kg IV lidocaine with 0.1 mg/kg IV morphine and in the control group 0.1 mg/kg IV morphine with intravenous saline as placebo will be administered. All syringes were covered with masking tape and physicians are unaware of its contents. A nurse (A Blinded observer) pain, nausea and vomiting in patients before treatment, and at 5, 10, 30, 60 and 120 minutes after the intervention will be recorded by the standard Visual Analog Scale. In addition, patient information such as age, sex, education, history of kidney stone, history of lithotripsy, renal involvement (left, right, or both), presence or absence of hydronephrosis on ultrasound and medication before visiting in the emergency department will be recorded.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201404196803N7**
Registration date: **2014-04-24, 1393/02/04**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2014-04-24, 1393/02/04

Registrant information

Name

Abolfazl Firouzian

Name of organization / entity

Mazandaran University of Medical Sciences

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Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Mazandaran University of Medical Sciences

Expected recruitment start date

2013-04-21, 1392/02/01

Expected recruitment end date

2014-04-30, 1393/02/10

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effects of adding intravenous lidocaine and morphine on pain of acute renal colic

Public title

The effect of lidocaine on acute renal colic pain

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Informed written consent; Clinical signs of renal colic with at least one of the three cases, hematuria in urinalysis, seeing stone in radiography (Kidney Ureter Bladder = KUB) and sonography of the urinary tract. Exclusion criteria: Patient's unwillingness to continue participation in the study at any time; History of cardiac disease, hypertension and asthma; Pregnancy; substance abuse; History of frequent acute renal colic (more than 3 times per year); Sensitivity to lidocaine.

Age

No age limit

Gender

Both

Phase

N/A

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

Used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Mazandaran University of
Medical Sciences

Street address

Mazandaran University of Medical Sciences, Moallem
Square.

City

Sari

Postal code

4817844718

Approval date

2013-02-27, 1391/12/09

Ethics committee reference number

91-218

Health conditions studied

1

Description of health condition studied

Acute renal colic pain

ICD-10 code

N23

ICD-10 code description

Unspecified renal colic

Primary outcomes

1

Description

Acute renal colic pain

Timepoint

Before intervention, and at 5, 10, 30, 60 and 120
minutes after the intervention

Method of measurement

Visual Analog Scale

Secondary outcomes

1

Description

Nausea and vomiting due to acute renal colic

Timepoint

Before intervention, and at 5, 10, 30, 60 and 120
minutes after the intervention

Method of measurement

Visual Analog Scale

Intervention groups

1

Description

In the intervention group 1.5 mg/kg IV lidocaine with 0.1
mg/kg IV morphine will be administered.

Category

Treatment - Drugs

2

Description

In the control group 0.1 mg/kg IV morphine with
intravenous saline as placebo will be administered.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Emam Khomeini Hospital

Full name of responsible person

Abolfazl Firouzian MD, Assistant Professor

Street address

Emam Khomeini Hospital, Amir mazandarani Ave.

City

Sari

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research, Mazandaran University
of Medical Sciences

Full name of responsible person

Ahmad Ali Enayati MD

Street address

Mazandaran University of Medical Sciences, Moallem Square.

City

Sari

Grant name

10506

Grant code / Reference number

91-218

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

Yes

Title of funding source

Vice chancellor for research, Mazandaran 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****Person responsible for scientific inquiries****Contact****Name of organization / entity**

Mazandaran University of Medical Sciences

Full name of responsible person

Abolfazl Firouzian MD

Position

Anesthesiologist, Assistant Professor

Other areas of specialty/work**Street address**

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

Mazandaran University of Medical Sciences

Full name of responsible person

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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*