

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

03 Jun 2026

### Synergistic Effects of Citalopram and Morphine in the Renal Colic Pain Relief

#### Protocol summary

##### Summary

Although the synergistic effects of opioids and other analgesic drugs such as Non Steroidal Anti Inflammatory Drugs have been established in relieving acute pain due to renal calculi, to date no studies have evaluated the concomitant administration of opiates and other drugs with analgesic effects, such as serotonin re-uptake inhibitors. Considering the high prevalence of renal colic, the present study was carried out to compare the effect of concomitant prescription of morphine and a placebo with that of morphine and citalopram on the management of acute pain due to renal calculi. The present double-blind randomized clinical trial was carried out from October 2012 to March 2013 in the Al-Zahra educational Hospital in Isfahan, Iran. A total of 90 patients with acute renal colic pain were randomly divided into two groups of 45 subjects each. The subjects in one group received morphine and placebo and other morphine and citalopram. The patients' pain severity was determined by visual analogue scale (VAS) before and 20 minutes after administration of medications. In case of persistent pain the second or even third dose was administered and the pain severity was once again determined. The decrease in pain severity in the morphine and citalopram group will be significant.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2014020812072N1**

Registration date: **2014-03-19, 1392/12/28**

Registration timing: **retrospective**

Last update:

Update count: **0**

##### Registration date

2014-03-19, 1392/12/28

#### Registrant information

##### Name

Mehrdad Esmailian

##### Name of organization / entity

Isfahan University of Medical Sciences

##### Country

Iran (Islamic Republic of)

##### Phone

+98 31 3629 3482

##### Email address

m\_esmailian@med.mui.ac.ir

#### Recruitment status

##### Recruitment complete

#### Funding source

Isfahan University of Medical Sciences

#### Expected recruitment start date

2012-03-20, 1391/01/01

#### Expected recruitment end date

2013-03-19, 1391/12/29

#### Actual recruitment start date

empty

#### Actual recruitment end date

empty

#### Trial completion date

empty

#### Scientific title

Synergistic Effects of Citalopram and Morphine in the Renal Colic Pain Relief

#### Public title

Citalopram in the Renal Colic Pain Relief Management

#### Purpose

Treatment

#### Inclusion/Exclusion criteria

The inclusion criteria : an age range of 18-55; a clinical diagnosis of acute colicky pain; pain severity of 7-10 based on visual analogue scale (VAS) and patients' written consent to participate in the study. The exclusion criteria : pregnancy or suspected of being pregnant;

contraindication in relation to taking morphine and citalopram based on drug catalog; a history of dependence on opioids or Selective serotonin re-uptake inhibitors; receiving an analgesic during a 6-hour period before presentation; peritonitis or peritoneal symptoms and signs; any disease preventing communication and patient's decision to leave the study

**Age**

From **18 years** old to **55 years** old

**Gender**

Both

**Phase**

N/A

**Groups that have been masked**

*No information*

**Sample size**

Target sample size: **90**

**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**

Isfahan University of Medical Sciences

**Street address**

Isfahan University of Medical Sciences

**City**

Isfahan

**Postal code**

391237

**Approval date**

2012-10-24, 1391/08/03

**Ethics committee reference number**

391237

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

Renal Colic

**ICD-10 code**

N23

**ICD-10 code description**

Unspecified renal colic

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

Renal Colic

**Timepoint**

every 20 min for 3 times

**Method of measurement**

Visual Analogue Scale

**Secondary outcomes****1****Description**

pain severity

**Timepoint**

every 20 min for 3 times

**Method of measurement**

Visual Analogue Scale

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

control group : check VAS before drug injection then the patients received 5mg Morphine and placebo. every 20min patients recheck for pain severity and if they have severe pain, they receive another dose of 5mg Morphine.

**Category**

Treatment - Drugs

**2****Description**

intervention group : check VAS before drug injection then the patients received 5mg Morphine and 20mg Citalopram. every 20min patients recheck for pain severity and if they have severe pain, they receive another dose of 5mg Morphine and 20mg Citalopram.

**Category**

Treatment - Drugs

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

Alzahra General Hospital

**Full name of responsible person**

Kashefi Parviz MD

**Street address**

Soffeh Blvd, Isfahan, Iran

**City**

Isfahan

## Sponsors / Funding sources

1

### Sponsor

**Name of organization / entity**

Isfahan University of Medical Sciences

**Full name of responsible person**

Iraj Bijan MD

**Street address**

Isfahan Medical University

**City**

Isfahan

**Grant name**

**Grant code / Reference number**

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

Yes

**Title of funding source**

Isfahan 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**

Isfahan University of Medical Sciences

**Full name of responsible person**

Mehrdad Esmailian MD

**Position**

Assistant Professor of Emergency Medicine

**Other areas of specialty/work**

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## Person responsible for scientific inquiries

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## Person responsible for updating data

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**Position**

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**Other areas of specialty/work**

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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*