

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

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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

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Position

Assistant Professor of Emergency Medicine

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