Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

Evaluation of the effect of addition of 5 mg meperidine to 10 mg bupivacaine for spinal anesthesia on postoperative pain in cesarean section surgery.

Protocol summary

Summary

The aim of this study was to evaluate the effect of meperidine 5 mg as an additive to bupivacaine for spinal anesthesia on postoperative pain in cesarean section surgery. This double blind randomized clinical trial study was performed on 40 patients aged 20-50 yr with American society anesthesia physical classification system (ASA) 1 or 2 were scheduled for elective cesarean surgery under spinal anesthesia. Patients were randomized according to usage of meperidine or normal salin as an additive to bupivacaine for spinal anesthesia. All patients with pre-existing or pregnancy-induced hypertension, known fetal abnormality or allergy to bupivacaine or meperidine were excluded. Postoperative analgesia was compared between two groups immediately and 2, 12, 24 hours after surgery. Also, the need for antiemetic was compared between groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015052821383N2**
Registration date: **2016-03-20, 1395/01/01**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2016-03-20, 1395/01/01

Registrant information

Name

Amir Saber Tanha

Name of organization / entity

Birjand University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 56 3243 2778

Email address

dr.saber@bums.ac.ir

Recruitment status

Recruitment complete

Funding source

Birjand University of Medical Sciences.

Expected recruitment start date

2015-02-05, 1393/11/16

Expected recruitment end date

2015-08-07, 1394/05/16

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation of the effect of addition of 5 mg meperidine to 10 mg bupivacaine for spinal anesthesia on postoperative pain in cesarean section surgery.

Public title

The effect of addition of meperidine to intrathecal bupivacaine on postoperative pain after cesarean section.

Purpose

Prevention

Inclusion/Exclusion criteria

inclusion criteria: all patients 20-50 years with score 1-2 according to American Society of Anesthesia classification for risk of anesthesia were scheduled for cesarean section under spinal anesthesia. Exclusion criteria: pre-existing or pregnancy-induced hypertension, known fetal abnormality or allergy to bupivacain or

mepridine.

Age

From **20 years** old to **50 years** old

Gender

Female

Phase

2-3

Groups that have been masked

No information

Sample size

Target sample size: **40**

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

Birjand University of Medical Sciences

Street address

Birjand University of Medical Sciences, Ghafari Street, Birjand

City

Birjand

Postal code

Approval date

2015-01-26, 1393/11/06

Ethics committee reference number

1393-11-01

Health conditions studied

1

Description of health condition studied

Cesarean section

ICD-10 code

O30-048

ICD-10 code description

Maternal care related to the fetus and amniotic cavity and possible delivery problems

Primary outcomes

1

Description

Postoperative pain

Timepoint

Immediately after surgery, 2, 12, 24 hours after surgery

Method of measurement

Visual analog score of pain

Secondary outcomes

1

Description

Intraoperative nausea and vomiting

Timepoint

Intraoperative

Method of measurement

Incidence of vomiting or need for administration of antiemetic drug.

Intervention groups

1

Description

Intrathecal injection of 0.5% hyperbaric bupivacaine 2.0 ml plus normal saline 0.5 ml

Category

Prevention

2

Description

Intrathecal injection of 0.5% hyperbaric bupivacaine 2.0 ml plus 1% meperidine 0.5 ml

Category

Prevention

Recruitment centers

1

Recruitment center

Name of recruitment center

Valiasr hospital of Birjand University of Medical Sciences

Full name of responsible person

Dr. Amir Saber Tanha

Street address

Valiasr hospital, Ghafari Street, Birjand

City

Birjand

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Birjand University of Medical Sciences

Full name of responsible person

Dr. Asghar Zarban
Street address
Birjand University of Medical Sciences, Ghafari Street, Birjand
City
Birjand
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Birjand 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
Birjand University of Medical Sciences
Full name of responsible person
Dr. Amir Saber Tanha
Position
Assistant professopr of anesthesia
Other areas of specialty/work
Street address
Birjand University of Medical Sciences, Ghafari Street, Birjand
City
Birjand
Postal code
Phone
+98 56 3244 3001
Fax
Email
amirsaber63@gmail.com
Web page address

Person responsible for scientific inquiries

Contact
Name of organization / entity
Birjand university of Medical Sciences
Full name of responsible person
Dr. Amir Saber Tanha
Position
Anesthesiologist, Assistant professor
Other areas of specialty/work
Street address
Birjand University of Medical Sciences, Ghafari Street, Birjand, Iran
City
Birjand
Postal code
Phone
+98 56 3244 3001
Fax
Email
amirsaber63@gmail.com
Web page address

Person responsible for updating data

Contact
Name of organization / entity
Birjand University of Medical Sciences
Full name of responsible person
Dr. Amir Saber Tanha
Position
Assisstant professore of anesthesia
Other areas of specialty/work
Street address
Birjand University of Medical Sciences, Ghafari Street, Birjand, Iran
City
Birjand
Postal code
Phone
Fax
Email
amirsaber63@gmail.com
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