

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Comparison of Phenylephrine and Ephedrine in treatment of Hypotension during Spinal Anesthesia for Cesarean Section

Protocol summary

Summary

Aim: comparing the effect of Phenylephrine and ephedrine in the treatment of hypotension caused by nerve block in the spinal anesthesia in patient undergoing cesarean section in Dezyany educational and medical center, Gorgan, Iran, 2012. It is a double-blind, clinical trial with inclusion criteria: patients older than 18 yr., ASA (American Society of Anesthesiologists) I and II and exclusion criteria: women with pre-existing or pregnancy-induced hypertension. 104 patients who were undergoing cesarean section were randomized into two groups: Group P (100µg Phenylephrine) and Group E (6µg Ephedrine). We compared the hemodynamic parameters (blood pressure, heart rate) and the incidence of hypotension between the two groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2012072910340N4**

Registration date: **2012-08-15, 1391/05/25**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2012-08-15, 1391/05/25

Registrant information

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Name of organization / entity

Golestan University of Medical Sciences

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Recruitment status

Recruitment complete

Funding source

Golestan university of medical sciences

Expected recruitment start date

2011-07-14, 1390/04/23

Expected recruitment end date

2012-04-22, 1391/02/03

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of Phenylephrine and Ephedrine in treatment of Hypotension during Spinal Anesthesia for Cesarean Section

Public title

Comparison of phenylephrine and ephedrine for Hypotension treatment

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: patients older than 18 yr.; ASA (American Society of Anesthesiologists) I and II; weight of 50–120 kg; height of 150–180 cm; women with singleton pregnancies scheduled for elective caesarean delivery under spinal anesthesia. Exclusion criteria: Women with pre-existing or pregnancy-induced hypertension, diabetes mellitus, known cardiovascular or cerebrovascular disease, fetal abnormality, or contraindication to spinal anesthesia.

Age

From **15 years** old to **50 years** old

Gender

Female

Phase

2-3

Groups that have been masked

No information

Sample size

Target sample size: **104**

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

Golstan university of medical sciences

Street address

Golestan university of medical sciences

City

Gorgan

Postal code

Approval date

2010-08-20, 1389/05/29

Ethics committee reference number

90010025157

Health conditions studied

1

Description of health condition studied

hypotension

ICD-10 code

E00-E90

ICD-10 code description

Endocrine, nutritional and metabolic diseases

Primary outcomes

1

Description

hypotension

Timepoint

during surgery

Method of measurement

monitoring

Secondary outcomes

1

Description

nausea and vomiting

Timepoint

after general anesthesia in recovery

Method of measurement

ask from patient

Intervention groups

1

Description

Group E received a 1-mL bolus of ephedrine 6 mg/mL

Category

Treatment - Drugs

2

Description

Group P received a 1-mL bolus of phenylephrine 100 µg/mL

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Dezyani hospital

Full name of responsible person

Street address

City

Gorgan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Golestan University of medical sciences

Full name of responsible person

Dr. Mohammad Vakili (Director of Research and Technology)

Street address

Vice chancellor for Research, Golestan University of Medical Sciences, kilometer 2 of Sari road

City

Gorgan

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Golestan 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

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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