

# The effect of ephedrine and phenylephrine on the ED50 of intrathecal bupivacaine required to provide anaesthesia for Caesarean section

**Submission date**  
29/09/2006

**Recruitment status**  
No longer recruiting

☐ Prospectively registered

☐ Protocol

**Registration date**  
29/09/2006

**Overall study status**  
Completed

☐ Statistical analysis plan

☒ Results

**Last Edited**  
28/07/2009

**Condition category**  
Pregnancy and Childbirth

☐ Individual participant data

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

### Contact name

Dr Gary Stocks

### Contact details

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Charing Cross Hospital  
Fulham Palace Road  
London  
United Kingdom  
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## Additional identifiers

### Protocol serial number

N0016176701

## Study information

### Scientific Title

**Study objectives**

To evaluate the effect of two vasopressors (drugs that are used to prevent blood pressure falling-hypotension- after spinal anaesthesia) on the dosages of local anaesthetic required to provide successful anaesthesia for caesarean section (CS).

As of 28/07/09 this record was updated. All updates can be found under the relevant field with the above update date.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Added as of 28/07/09:

Granted February 2006

**Study design**

Randomised controlled trial

**Primary study design**

Interventional

**Study type(s)**

Other

**Health condition(s) or problem(s) studied**

Pregnancy and Childbirth: Anaesthesia

**Interventions**

Patients were randomised to receive

1. either phenylephrine at a rate of  $16.6 \mu\text{g min}^{-1}$  (concentration  $1 \mu\text{g ml}^{-1}$ ) or ephedrine at a rate of  $1.5 \text{ mg min}^{-1}$  (concentration  $90 \mu\text{g ml}^{-1}$ )
2. varying doses of hyperbaric bupivacaine with fentanyl  $25 \mu\text{g}$  using a double-blinded, up-down sequential allocation design

**Intervention Type**

Drug

**Phase**

Not Specified

**Drug/device/biological/vaccine name(s)**

ephedrine phenylephrine bupivacaine

**Primary outcome(s)**

The ED50 of intrathecal heavy bupivacaine with  $25 \text{ mcg}$  fentanyl required to achieve a block to touch to Xiphisternum in the ephedrine and phenylephrine groups.

**Key secondary outcome(s)**

Not provided at time of registration

**Completion date**

31/12/2007

## Eligibility

### Key inclusion criteria

Patients undergoing elective CS with a viable singleton foetus who require regional anaesthesia will be identified.

### Participant type(s)

Patient

### Healthy volunteers allowed

No

### Age group

Adult

### Sex

Female

### Key exclusion criteria

Does not match inclusion criteria

### Date of first enrolment

01/02/2006

### Date of final enrolment

31/12/2007

## Locations

### Countries of recruitment

United Kingdom

England

### Study participating centre

Department of Anaesthesia

London

United Kingdom

W6 8RF

## Sponsor information

### Organisation

## Funder(s)

### Funder type

Hospital/treatment centre

### Funder Name

Hammersmith Hospital NHS Trust (UK)

## Results and Publications

### Individual participant data (IPD) sharing plan

### IPD sharing plan summary

Not provided at time of registration

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	01/06/2009		Yes	No