

# Comparison of bupivacaine and lidocaine with epinephrine for digital nerve blocks

<b>Submission date</b> 31/03/2008	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 08/04/2008	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 11/05/2009	<b>Condition category</b> Signs and Symptoms	<input type="checkbox"/> Individual participant data

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

**Secondary identifying numbers**  
2061015

## Study information

## **Scientific Title**

### **Study objectives**

In this study, we are comparing bupivacaine versus lidocaine with epinephrine when used for the digital block in healthy volunteers aiming to know if there is a difference in the pain of injection. Time of onset and duration of action will also be recorded and compared between the two local anaesthetics.

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

Ethics approval received from:

1. The Clinical Research Committee of King Faisal Specialist Hospital and Research Center, Riyadh (Saudi Arabia) on the 17th May 2006 (proposal no.: 2061015)
2. The Research Ethics Committee of King Faisal Specialist Hospital and Research Center, Riyadh (Saudi Arabia) on the 12th June 2006

The reference number at the Office of Research Affair at King Faisal Specialist Hospital and Research Center, Riyadh (Saudi Arabia) is ORA/0642/27.

### **Study design**

Single-centre randomised, double-blinded, prospective study with a single self-controlled arm

### **Primary study design**

Interventional

### **Secondary study design**

Randomised controlled trial

### **Study setting(s)**

Hospital

### **Study type(s)**

Treatment

### **Participant information sheet**

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

Injection pain in digital nerve blocks

### **Interventions**

1. Bupivacaine 0.5% (4 ml for each digit)
2. Lidocaine 1% with 1:100,000 epinephrin (4 ml for each digit)

Both anaesthetics were administered in either the right or left middle finger based on the randomisation table and each participant received both anaesthetics in either hand so each participant acts as a self-control to compare the pain of injection. All participants were blinded to which anaesthetics were going in each hand.

The total duration will be until the return of sensation and this will be followed by a 24-hour follow-up.

**Intervention Type**

Drug

**Phase**

Not Specified

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

Bupivacaine, lidocaine, epinephrine

**Primary outcome measure**

The primary outcome was the pain of injection, and it was measured using a 0- to 100-mm visual analog scale (VAS).

**Secondary outcome measures**

1. The time in minutes from injection until anaesthesia, measured using testing needle pinpricks
2. The time in minutes from injection until return of sensation, measured using testing needle pinpricks

**Overall study start date**

27/08/2006

**Completion date**

28/08/2006

## Eligibility

**Key inclusion criteria**

1. Healthy volunteers more than 18 years of age, either sex
2. No history of cardiovascular or liver disease
3. Not diabetic
4. No history of peripheral vascular disease
5. Not on any current medication
6. Has not taken analgesia within last 48 hours
7. Hasn't had any previous procedures conducted on both hands
8. No previous hand illness (e.g., Raynaud's disease)
9. No known allergies

**Participant type(s)**

Healthy volunteer

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

12

**Key exclusion criteria**

Does not meet above inclusion criteria.

**Date of first enrolment**

27/08/2006

**Date of final enrolment**

28/08/2006

## **Locations**

**Countries of recruitment**

Saudi Arabia

**Study participating centre**

P.O. Box 230691

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Saudi Arabia

11321

## **Sponsor information**

**Organisation**

King Faisal Specialist Hospital and Research Center (Saudi Arabia)

**Sponsor details**

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**Sponsor type**

Hospital/treatment centre

**Website**

<http://bportal.kfshrc.edu.sa/wps/portal/bportal>

**ROR**

<https://ror.org/05n0wgt02>

# Funder(s)

## Funder type

Hospital/treatment centre

## Funder Name

King Faisal Specialist Hospital and Research Centre (Saudi Arabia)

## Alternative Name(s)

King Faisal Specialist Hospital

## Funding Body Type

Private sector organisation

## Funding Body Subtype

Other non-profit organizations

## Location

Saudi Arabia

# Results and Publications

## Publication and dissemination plan

Not provided at time of registration

## Intention to publish date

## 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	01/05/2009		Yes	No