

# Effects of NMDA-receptor antagonism on hyperalgesia, opioid use, and pain after major surgery in young and elderly patients

<b>Submission date</b> 26/09/2005	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 26/09/2005	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 11/12/2007	<b>Condition category</b> Surgery	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

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

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Dr Lucia Gagliese

**Contact details**  
Department of Anaesthesia  
Toronto General Hospital  
200 Elizabeth Street  
Toronto  
Canada  
M5G 2C4  
+1 416 340 4296  
[lucia.gagliese@uhn.on.ca](mailto:lucia.gagliese@uhn.on.ca)

## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**

# Study information

## Scientific Title

### Study objectives

Our primary aim is to determine whether perioperative NMDA-receptor antagonism has differential effects on postoperative pain, hyperalgesia and morbidity in younger and older patients. In order to achieve this aim, we propose to conduct the first randomized, double-blind placebo-controlled study designed to investigate age differences in the effects of perioperative oral administration of an NMDA-receptor antagonist (amantadine) in men undergoing radical prostatectomy. In addition, age differences in psychosocial factors and the pharmacological properties of amantadine and morphine will be measured to control for, and clarify, their contribution to the differences found.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

Ethics approval received from the University Health Network Research Ethics Board, Toronto, Ontario on the 12th November 2003.

### Study design

Randomised controlled trial

### 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

Postoperative pain in radical prostatectomy

### Interventions

Amantadine versus Placebo comparison.

Trial details received: 12 September 2005

### Intervention Type

Drug

**Phase**

Not Specified

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

Amantadine

**Primary outcome measure**

Hyperalgesia and opioid consumption.

**Secondary outcome measures**

Assess age differences in the intensity and course of secondary hyperalgesia after surgery.

**Overall study start date**

01/04/2002

**Completion date**

31/12/2006

## **Eligibility**

**Key inclusion criteria**

1. Able to read and write English
2. Age 18 - 54 years or greater than 55 years, male
3. American Society of Anesthesiologists (ASA) class 1 to 3
4. Scheduled for elective radical prostatectomy
5. Body weight between 60 and 90 kg, Body Mass Index (BMI) less than or equal to 30

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Male

**Target number of participants**

132

**Key exclusion criteria**

1. Significant Central Nervous System (CNS), respiratory, cardiac, hepatic, renal or endocrine dysfunction and/or any significant sequelae
2. Contraindications allergies to, and/or past adverse reactions to opioid analgesics or amantadine
3. History of Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV) axis I

disorder or cognitive dysfunction

4. History of epilepsy or other seizures

5. History of chronic pain of at least 6 months duration

6. History of long-term opioid use for chronic pain

7. History of long-term use of amantadine or other antiparkinsonian drug

8. Ingestion of antiemetic medication within 48 hours before surgery

9. History of alcohol or drug dependency/abuse of at least 6 months duration

**Date of first enrolment**

01/04/2002

**Date of final enrolment**

31/12/2006

## **Locations**

**Countries of recruitment**

Canada

**Study participating centre**

**Department of Anaesthesia**

Toronto

Canada

M5G 2C4

## **Sponsor information**

**Organisation**

University Health Network, Toronto (Canada)

**Sponsor details**

200 Elizabeth Street

Toronto

Canada

M5G 2C4

kfibiger@uhnres.utoronto.ca

**Sponsor type**

University/education

**Website**

<http://www.uhnresearch.ca>

**ROR**

<https://ror.org/026pg9j08>

# Funder(s)

## Funder type

Research organisation

## Funder Name

Canadian Institutes of Health Research (CIHR) (Canada) - <http://www.cihr-irsc.gc.ca> (ref: MCT-52682)

# 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