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

Submission date	Recruitment status	Prospectively registered
26/09/2005	No longer recruiting	Protocol
Registration date	Overall study status	Statistical analysis plan
26/09/2005	Completed	Results
Last Edited	Condition category	Individual participant data
11/12/2007	Surgery	[] 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

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# Additional identifiers

Protocol serial number

# MCT-52682

# 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

# Study type(s)

Treatment

# 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(s)

Hyperalgesia and opioid consumption.

# Key secondary outcome(s))

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

# 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

# Healthy volunteers allowed

No

# Age group

Adult

# Lower age limit

18 years

#### Sex

Male

## 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 antiussive 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

Study participating centre
Department of Anaesthesia
Toronto
Canada
M5G 2C4

# Sponsor information

# Organisation

University Health Network, Toronto (Canada)

## **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**

Individual participant data (IPD) sharing plan

# IPD sharing plan summary

Not provided at time of registration