A prospective, randomised, double-blind, placebo-controlled trial to assess the respiratory effects of oxycodone versus morphine in anaesthetised patients

Submission date	Recruitment status	Prospectively registered
28/09/2007	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
28/09/2007	Completed	[X] Results
Last Edited	Condition category	[] Individual participant data
18/10/2011	Surgery	

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Dr Vivek Mehta

Contact details

Anaesthetics Laboratory
St Bartholomew's Hospital
West Smithfield
London
United Kingdom
EC1A 7BE
+44 0207601 7524
vivek.mehta@bartsandthelondon.nhs.uk

Additional identifiers

Protocol serial number N0205190802

Study information

Scientific Title

Study objectives

To investigate to what extent modest and pre-defined degrees of respiratory depression may be produced by oxycodone and compare this to patients who receive intravenous morphine or placebo under identical conditions using a previously validated model.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Not provided at time of registration

Study design

Prospective randomised double-blind placebo-controlled trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Surgery: Anaesthesia

Interventions

A prospective randomised double-blind placebo-controlled trial.

Oxycodone 0.05mg/kg IV (12 patients), oxycodone 0.1mg/kg IV (12 patients), Oxycodone 0.2mg/kg IV (12 patients), morphine 0.1mg/kg IV (12 patients), or placebo - normal saline (6 patients)

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

oxycodone versus morphine

Primary outcome(s)

The extent to which oxycodone produces respiratory depression and compare this to morphine and placebo.

The primary endpoint is time to respiratory depression, defined as respiratory rate decreased by $\geq 33\%$ and or end-tidal CO² increased by ≥ 1.5 kPa.

Key secondary outcome(s))

To evaluate the extent of reversibility of any such respiratory depression by the administration of naloxone.

The principle secondary endpoint is the amount of naloxone required to reverse respiratory depression effects.

Completion date

12/12/2007

Eligibility

Key inclusion criteria

- 1. Patients aged 18-55 years
- 2. Patients who are ASA 1-2
- 3. Patients must be inpatients
- 4. Patients who are due to undergo surgery of greater than 30 minutes duration under GA
- 5. Patient has given written informed consent
- 6. Patient weighs between 45 and 100kg, and/or BMI ≥30

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Upper age limit

55 years

Sex

Not Specified

Key exclusion criteria

- 1. Patients who are allergic to oxycodone, naloxone or morphine
- 2. Patients with a history of substance abuse
- 3. Patients with a history of anaesthetic complications
- 4. Patients who have been on long-term opioid therapy, or have taken strong opioids within the last two weeks
- 5. Patients who are considered unsuitable by the responsible anaesthetist for whom the required lengthening of the anaesthesia time is deemed to constitute an unacceptable increased risk
- 6. Patients who are involved in existing research
- 7. Patients who have any condition predisposing to respiratory depression

Date of first enrolment

13/12/2006

Date of final enrolment

Locations

Countries of recruitment

United Kingdom

England

Study participating centre Anaesthetics Laboratory London United Kingdom EC1A 7BE

Sponsor information

Organisation

Record Provided by the NHSTCT Register - 2007 Update - Department of Health

Funder(s)

Funder type

Government

Funder Name

Barts and The London NHS Trust

Funder Name

NHS R&D Support Funding

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? results

Results article 01/10/2010 Yes No