Bolus administration versus continuous infusion of Propofol sedation in flexible bronchoscopy

Submission date	Recruitment status	Prospectively registered
03/02/2011	No longer recruiting	Protocol
Registration date	Overall study status	Statistical analysis plan
03/05/2011	Completed	[X] Results
Last Edited	Condition category	[] Individual participant data
27/10/2014	Respiratory	

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Contact details

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Additional identifiers

Protocol serial number N/A

Study information

Scientific Title

Bolus administration versus continuous infusion of Propofol sedation in flexible bronchoscopy: a randomised non-inferiority trial

Acronym

Propofol Study

Study objectives

Propofol is a sedative-hypnotic with a rapid onset of action coupled with smooth and rapid recovery. Multiple studies using it as a sedative agent for gastrointestinal endoscopic procedures have shown propofol to be safe and effective. More recently propofol-only sedation was shown to be a feasible and safe sedation method for bronchoscopic procedures as well. In the vast majority of studies an intermittent bolus technique was used. Hardly any data exists for the use of propofol using a continuous infusion as the sedation method in bronchoscopy. To show that for sedation in flexible bronchoscopy the use of propofol using a continuous infusion is associated with a incidence of complications within 5% of that of an intermittent bolus technique, or better.

Ethics approval required

Old ethics approval format

Ethics approval(s)

The study protocol has been submitted to the Ethics Committee, Basel, Switzerland

Study design

Prospective randomised non-inferiority single-centre study

Primary study design

Interventional

Study type(s)

Diagnostic

Health condition(s) or problem(s) studied

Pulmonary disease diagnosis, need for flexible bronchoscopy

Interventions

Propofol continous infusion versus bolus for sedation in flexible bronchoscopy

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

- 1. Number (percentage) of complications (oxygen desaturation less than or equal to 90%
- 2. Need for chin-support
- 3. Need for nasopharyngeal or oropharyngeal airway insertion
- 4. Need for intubation
- 5. Hypotension with a systolic blood pressure of less than 90 mmHq
- 6. Minor or major bleeding
- 7. Intensive Care Unit [ICU] need post-bronchoscopy
- 8. Pneumothorax
- 9. Need to abort bronchoscopy
- 10. Death

These outcomes are assessed by the study physician during and up to 24 hours after the procedure

Key secondary outcome(s))

- 1. Total dose of propofol, dose of propofol per kilogram body weight and per minute
- 2. Duration of the procedure
- 3. Mean lowest oxygen saturation during the procedure
- 4. Mean lowest systolic blood pressure during the procedure
- 5. Hemodynamic parameters other than blood pressure during and after the procedure
- 6. Cough scores, as assessed by a Visual Analogue Scale (VAS) by patients, nurses and physicians during and 2 hours after the procedure
- 7. Patient discomfort
- 8. Median patient overall well-being (comfort) at 1 and 2 hours after the procedure
- 9. Willingness to undergo a repeated procedure, assessed by a VAS 2 hours after the procedure
- 10. Fear of undergoing a repeated procedure, assessed by a VAS 2 hours after the procedure
- 11. Supplemental lidocaine doses, assessed by the nurse team and study physician during the procedure, as judged by the bronchoscopist
- 12. Medication doses, assessed by the nurse team and study physician during the procedure, as judged by the bronchoscopist

Completion date

30/09/2012

Eligibility

Key inclusion criteria

- 1. Patients aged 18 or older
- 2. Patients undergoing flexible bronchoscopy

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Key exclusion criteria

- 1. Known allergy to propofol
- 2. Mental disorder preventing appropriate judgment concerning study participation
- 3. Pregnancy and breast-feeding
- 4. Intubated patients

Date of first enrolment

01/04/2011

Date of final enrolment

30/09/2012

Locations

Countries of recruitment

Switzerland

Study participating centre Clinic of Pneumology and Respiratory Cell Research

Basel Switzerland 4031

Sponsor information

Organisation

University Hospital Basel (Switzerland)

ROR

https://ror.org/04k51q396

Funder(s)

Funder type

University/education

Funder Name

University Hospital Basel (Switzerland) - Clinic of Pneumology and Respiratory Cell Research

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output typeDetailsDate createdDate addedPeer reviewed?Patient-facing?Results articleresults01/02/2014YesNoParticipant information sheetParticipant information sheet11/11/202511/11/2025NoYes