

Bolus administration versus continuous infusion of Propofol sedation in flexible bronchoscopy

Submission date 03/02/2011	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol
Registration date 03/05/2011	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 27/10/2014	Condition category Respiratory	☐ 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

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

Primary study design

Interventional

Study design

Prospective randomised non-inferiority single-centre study

Study type(s)

Diagnostic

Health condition(s) or problem(s) studied

Pulmonary disease diagnosis, need for flexible bronchoscopy

Interventions

Propofol continuous 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 mmHg
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 type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
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[Results article](#)

results

01/02/2014

Yes

No