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Maintaining and improving skills in fibreoptic intubation

Submission date	Recruitment status	[ ] Prospectively registered
29/09/2006	No longer recruiting	[ ] Protocol
Registration date	**Overall study status**	[ ] Statistical analysis plan
29/09/2006	Completed	[ ] Results
Last Edited	**Condition category**	[ ] Individual participant data
27/01/2015	Surgery	[ ] Record updated in last year

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
N0265105787

Study information

Scientific Title
Maintaining and improving skills in fibreoptic intubation

Study objectives
How frequently do anaesthetists need to perform fibreoptic intubation in order to maintain or improve their endoscopy skills?

Ethics approval required
Old ethics approval format

Ethics approval(s)
Not provided at time of registration

Study design
Randomised controlled trial

Primary study design
Interventional

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Surgery: Anaethesia

Interventions
Specifically for research purposes.
45 consultant anaesthetists, based at University Hospital Birmingham, who have performed few or no fibreoptic intubations over the last 3 years, will be studied. Each one will perform 15 fibreoptic orotracheal intubations with a videoendoscope, in elective surgical patients, ASA groups 1 or 11, who need orotracheal intubation as part of their anaesthetic management, under the supervision of an anaesthetist experienced in the technique. Each patient will receive a standard anaesthetic induction and will be treated with isoflurane in 100% oxygen for 2-3 minutes before intubation. The instructor will give
demonstrations, advice, feedback guidance and direct assistance as necessary. The time taken for the fibrescope tip to pass from the mouth to the carina will be noted and recorded. If the oxygen saturation falls below 97% at any time, or the ECG or BP readings fall outside normal limits or if there is any cause for concern about the patient's safety or if the consultant under refresher training is unable to complete the endoscopy within 60 seconds, the instructor will take over and complete the intubation. When the first 15 endoscopies have been performed, learning curves will be constructed for each anaesthetist.

Each anaesthetist will then be randomly allocated to one of three groups. The first group of anaesthetists will perform one intubation every three months, the second group will perform one intubation per month and the third group will perform one intubation per week, again under the supervision of an experienced endoscopist, under the conditions described previously. After one year, each member of each group will then perform a further 15 intubations under the same conditions as before.

The group learning curves will be compiled and compared. The statistical analysis will be performed by Craig Ramsay, Senior Statistician, Health Services Research Unit, University of Aberdeen and will determine which group's skills (if any) have improved, remained stable or deteriorated.

Intervention Type
Procedure/Surgery

Phase

Not Specified

Primary outcome(s)
Not provided at time of registration

Key secondary outcome(s))
Not provided at time of registration

Completion date
22/02/2008

Eligibility

Key inclusion criteria
The anaesthetists involved will all be consultants based at University Hospital Birmingham. They will be those who have performed few or no fibreoptic intubations over the last 3 years, but who have a strong desire to develop and maintain proficiency in this field.

The patients involved will be elective general, orthopaedic, plastic, gynaecological, ENT or maxillofacial surgical patients, ASA group 1 or 11, aged 16 to 65, who require orotracheal intubation as part of their anaesthetic management and who give informed consent.

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Not Specified

Sex
Not Specified

Key exclusion criteria
Patients with morbid obesity, oesophageal reflux or expected to present difficult intubation will not be included.

Date of first enrolment
22/02/2002

Date of final enrolment
22/02/2008

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
Selly Oak Hospital
Birmingham
United Kingdom
B29 6JD

Sponsor information

Organisation
Record Provided by the NHSTCT Register - 2006 Update - Department of Health

Funder(s)

Funder type
Hospital/treatment centre

Funder Name
University Hospital Birmingham NHS Trust (UK)

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?
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes