• all had capnography, a bougie, appropriate ranges of facemasks, oro-/nasopharyngeal airways readily available.

• one lacked the minimum of two working laryngoscope handles; one 

• all had alternative blades; five a McCoy, the remaining either long/straight.

• three had an intubating LMA; three a Proseal LMA.

• none had a flexible fiberoptic bronchoscope.

• two stocked a Glidescope.

• eight stocked a kink resistant cannula for cricothyroid puncture with high pressure jet ventilation.

• one lacked the minimum of two working laryngoscope handles; one 

• all had alternative blades; five a McCoy, the remaining either long/straight.

• three had an intubating LMA; three a Proseal LMA.

• none had a flexible fiberoptic bronchoscope.

• two stocked a Glidescope.

• eight stocked a kink resistant cannula for cricothyroid puncture with high pressure jet ventilation.

As highlighted in NAP4, major airway events in the ED were due to inadequacies in planning and provision of airway equipment [1]. Although no guidelines exist regarding required equipment in the ED, the DAS provide a suggested list [3]. Our data demonstrates significant variations (in some cases a complete absence) in essential equipment across EDs.

Conclusion(s): For those involved in advanced airway manoeuvres, provision of essential equipment and adequate training is vital. The introduction of a standardised DAT across a training region, which is regularly audited and included as a core component of anaesthesia and EM training, would be a step closer to improving patient safety.

References:

Acknowledgments: None.

Conflict of Interests: None declared.

19AP6-3
The ascendency of the videolaryngoscope: findings from an audit of recent experience in airway management techniques
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Background and Goal of Study: When managing the difficult airway, factors contributing to adverse outcomes include lack of training and unfamiliarity with equipment. We surveyed members of our anaesthetic department to determine recent experience with airway equipment and techniques, with a view to improving training.

Materials and Methods: A questionnaire was distributed to all members (19 trainees and 23 consultants) of our anaesthetic department. Respondents were asked to indicate recency of training in or use of 12 pieces of equipment, and 12 alternative laryngoscope blades, a videolaryngoscope, one alternative intubation technique (intubating laryngeal mask airway (ILMA) or fiberoptic bronchoscope) and one cricothyrotomy technique.

Results and Discussion: The response rate was 71% (30/42). A videolaryngoscope had been used by 76% of respondents within the last year, while 67% had used an alternative laryngoscope blade. This difference was more marked for consultants: 90% versus 50% respectively. 85% of respondents had used the fiberoptic bronchoscope or ILMA within the last year. Only 63% met the standard for training in at least one cricothyrotomy technique. Trainees were more likely than consultants to meet this standard but three respondents (all trainees) had never had training in any cricothyrotomy technique.

In this UK District General Hospital anaesthetic department we have found greater utilisation of videolaryngoscopes than traditional alternative laryngoscope blades, particularly amongst consultants. This could indicate their perceived superiority, or reflect increased usage in an effort to improve familiarity. Either way, the result represents a major change in contemporary anaesthetic practice. We have also demonstrated a lack of recent training in cricothyrotomy, which could be addressed by in-house training.

Conclusions: Videolaryngoscopes are becoming more popular and in our department are used more often than alternative laryngoscope blades. It is nonetheless important to maintain skills in less technologically advanced techniques, including cricothyrotomy.

References:

19AP6-4
A novel maneuver to blindly position an endobronchial blocker
Kim H.-C., Hong D.M., Bahk J.-H., Kim H.J., Jeon Y., Min J.J.
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Background: The use of a fiberoptic bronchoscope (FOB) is fundamental to adjust position of the endobronchial blocker. However, occasionally a small caliber FOB is unavailable or inapplicable. We thus tried to devise a blind method to locate the blocker without FOB.

Methods: A Uniblocker® was inserted into the endotracheal tube (ETT). Peak inspiratory pressure (PIP) abruptly increased and expiratory V̇e disappeared with inflation of the balloon (Fig. 1A). The blocker was advanced with its tip rotated to non-thoracotomy side until abrupt drop in PIP and reappearance of expiratory V̇e (Fig. 1B). Thereafter, blocker was advanced 3 cm further with the cuff deflated (Fig. 1C). Using a FOB, position of the blocker was checked after inflation of the cuff. Results were graded as follows: 1, the blocker cuff positioned just below the carina without herniation; 2, below the tracheal carina, but not too deep; 3, acceptable herniation of the blocker; 4, one lung ventilation appeared impossible. The whole procedure was repeated to the thoracotomy side.

Results: With the enrolled 56 patients, 112 blocker placements were tried. The number of suitable placements (Grade 1-3) was 85 of 112 (75.9%) (Table 1). In right, 52 of 56 (92.8%) attempts were suitable, 3 could not obstruct the right upper bronchus, and 1 could not visualize the left main bronchus. In left, 33 of 56 (58.9%) attempts were suitable, 18 cases failed to be located at left bronchus, 3 cases were too deep, and 2 cases were too shallow.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Right bronchus, n = 56</th>
<th>Left bronchus, n = 56</th>
<th>Overall, n = 112</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>43 (76.7%)</td>
<td>24 (42.8%)</td>
<td>67 (59.8%)</td>
</tr>
<tr>
<td>2</td>
<td>7 (12.5%)</td>
<td>7 (12.5%)</td>
<td>14 (12.5%)</td>
</tr>
<tr>
<td>3</td>
<td>2 (3.6%)</td>
<td>2 (3.6%)</td>
<td>4 (3.6%)</td>
</tr>
<tr>
<td>4</td>
<td>4 (7.2%)</td>
<td>23 (41.1%)</td>
<td>27 (24.1%)</td>
</tr>
</tbody>
</table>

Conclusions: This blind technique to position a Uniblocker® could be employed almost successfully in case of isolation of right lung. However, in case of isolation of left lung, a FOB is required to direct the blocker into targeted direction.

19AP6-5
Need some help? Dealing with difficult airway
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Background and Goal of Study: The availability of help should be considered in case of difficult airway (DA) scenarios. It’s our purpose to identify who verifies the availability of help when managing a predictable DA, who has called for help for DA management and to point out factors that might relate with these behaviors.

Materials and Methods: A questionnaire was delivered to all the anesthesia residents and practitioners. The availability of help should be considered in case of isolation of right lung. However, in case of isolation of left lung, a FOB is required to direct the blocker into targeted direction.

Results and Discussion: All the 100 questionnaires were returned. 69% of the inquiries verify the availability of help before managing a DA. This correlates positively with: female gender (r=0.497; p < 0.001); searching for difficult ventilation predictors (r=0.222; p < 0.05); direct access to a laryngeal mask airway (LMA) (r=0.230; p < 0.05); and calling for help when managing a DA.

References:


Acknowledgments: None.

Conflict of Interests: None declared.