

The difficulty with narrow bore cannulae is how to oxygenate safely. Dr Heard highlights a general lack of evidence in this area and correctly points out that many reported problems are associated with high pressure devices. Heard has overcome this with his rapidO2 device, but the guidelines were primarily based on evidence derived from human rather than animal or mannequin based studies and currently there is insufficient published evidence in humans to recommend its wholesale adoption across the UK.

NAP 4 showed that the approach to Front of Neck Access in the UK was highly variable. Sometimes anaesthetists were presented with unfamiliar equipment that they were unable to use. An important objective of these guidelines was to introduce a standard approach to the emergency surgical airway in order to simplify the provision of equipment and training. This also has the benefit of removing some decision making during a crisis.

The guidelines were written with practising anaesthetists (not airway experts) in mind and aim to ensure that the techniques described are accessible to all anaesthetists. There was little hard evidence on which to base a decision about what to select, but simple surgical rescue techniques have been shown to be effective in a variety of settings, from difficult military situations when performed by soldiers under fire, to well-rehearsed medical teams in the prehospital emergency setting.

In summary, the emphasis is on standardised training in the scalpel technique for all, but the guidelines recognise that it is reasonable for individuals who are appropriately trained in

alternative techniques to use them; jet ventilation via a narrow bore cannula for anaesthetists who do this in routine practice, wire guided techniques such as percutaneous tracheostomy for individuals who do this in regular practice, or indeed the protocolised rescue oxygenation techniques described and taught by Heard and colleagues.

In time it may become evident that the use of particular techniques improves the success rate in the management of CICO and if this happens the recommendations (and associated training) will need to change. A longitudinal observational study of emergency front of neck access patients is probably the only way to examine this issue and we remain optimistic that this can be established in the UK in due course.

Declaration of interest

None declared.

Reference

1. Frerk CM, Mitchell VS, McNarry AF, et al. Difficult Airway Society 2015 guidelines for the management of unanticipated difficult intubation in adults. *Br J Anaesth* 2015; **115**: 827–48

doi: 10.1093/bja/aew287

Dilutional effect of nasal oxygenation

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Editor—We welcome the new DAS guidelines¹ and have been implementing the new advice. In doing so we have noticed an important point that needs further elaboration.

The guidelines state “The administration of oxygen by nasal cannula in addition to standard pre-oxygenation and face-mask ventilation is recommended in high-risk patients.”

We have noted that the simultaneous administration of gas flow via nasal cannula and face-mask ventilation will lead to a dilutional effect on inspired volatile agents. In this situation, high flow nasal cannula (for instance 15 litres min⁻¹ as described in NODESAT²) could cause unwanted lightening of anaesthesia and awareness or airway issues.

When using volatile anaesthesia with apnoeic oxygenation techniques, nasal cannula flow should be confined exclusively to the periods of attempting to intubate and insert an SAD.

A simpler approach is to use TIVA when both apnoeic oxygenation via nasal cannula and face-mask ventilation is administered to the high-risk patient.

Declaration of interest

None declared.

References

1. Frerk C, Mitchell VS, McNarry AF, et al. Difficult Airway Society 2015 guidelines for management of unanticipated difficult intubation in adults. *Br J Anaesth* 2015; **115**: 827–48
2. Levitan RM. NO DESAT! Nasal Oxygen During Efforts Securing A Tube 2010. Available from <http://www.airwaycam.com/wp-content/uploads/2015/03/NO-DESAT.pdf> (accessed 12 February 2016)

doi: 10.1093/bja/aew288