I advocate the phrase ‘Mask – LMA – Knife’ as a memorable message for CICV management. As in the Vortex model, this prompts the operator to attempt both supraglottic airway and mask ventilation, then if unsuccessful to move on to surgical intervention. Prompting surgical cricothyroidotomy over cannula cricothyroidotomy is consistent with the 4th National Audit Project’s finding of high failure rates for cannula cricothyroidotomy in adults. The summary phrase ‘Mask – LMA – Knife’ presents the core features of the Vortex Approach to CICV situations in an easily remembered form and would complement teaching of the Vortex or other CICV algorithms.

Declaration of interest

None declared.

The Vortex: striving for simplicity, context independence and teamwork in an airway cognitive tool

N. C. Chrimes

Melbourne, Australia

E-mail: nicholas.chrimes@me.com

References


doi:10.1093/bja/aev043
need to keep efficiently moving forward on the ‘slippery slope’ of the funnel, and the diminishing time and options remaining as non-surgical airway techniques are exhausted and the situation spirals further into the narrower regions of the funnel.

Perhaps one reason that our experience differs from Dr Lown’s intuitive expectation is the Vortex Approach’s emphasis on the participation of the whole team in managing an airway emergency. Training in the use of the Vortex Approach is undertaken in inter-professional groups. Thus, rather than placing the responsibility solely on an airway operator, who may not only be cognitively but also technically and emotionally overwhelmed, the Vortex uses a simple visual template to provide the team with a shared mental model that encourages them to collectively suggest rescue strategies in a structured manner. This may allow the team to perform more effectively than an individual clinician under stress. Whether these anecdotal observations will translate into improved management of airway crises remains to be seen. We are currently planning research to assess whether use of the Vortex Approach influences team performance during an airway crisis in a simulated setting.

As an aside, it is worth noting that the Vortex Approach does not specify whether an emergency surgical airway is undertaken by a cannula or scalpel technique. The NAP4 data on the relative success of these approaches needs to be interpreted with an understanding that a significant number of surgical airways performed via a scalpel technique in the 4th National Audit Project were undertaken by surgeons in situations where some degree of oxygenation via non-surgical means was possible, allowing them to be performed in a more controlled fashion over a significant period of time. In contrast, most of the cannula techniques were undertaken by anaesthetists in the time-critical context of a true can’t ventilate, can’t intubate situation. These differences clearly introduce a significant bias into the likelihood of success with each technique.

Declaration of interest
None declared.

References

doi:10.1093/bja/aev047