CORRESPONDENCE

Role of sugammadex in rapid sequence induction and intubation

Editor—I am concerned that the findings and conclusions made by Sørenson and colleagues imply to the reader that sugammadex is an acceptable rescue in the event of any ‘can’t intubate, can’t ventilate’ (CICV) situation. As they have demonstrated, the return to spontaneous ventilation in a group of selected patients was almost 4 min. It is of interest to note that the reversal of neuromuscular block in the context of CICV is in direct contradiction of a recommendation made by the authors of the fourth National Audit Project (NAP 4).2

NAP 4 described the common behavioural failings in a CICV situation. In particular, delayed decision-making with regard to airway rescue and re-oxygenation was considered likely to have made a significant contribution to airway-related morbidity. Sørenson and colleagues have gone some way by acknowledging that their study does not reflect actual practice by stating that before the decision to seek sugammadex, the anaesthetist will have made several attempts to intubate the trachea, that is, in reality, the patient would be closer to the onset of desaturation and hypoxaemia before sugammadex is administered. In addition, it has been demonstrated that in a CICV situation, it can take up to 6.7 min to deliver a correct dose of sugammadex.3

In contrast, a case report in the same issue highlights how reversal of neuromuscular block by sugammadex in a real CICV situation does not equate to re-oxygenation as hoped.4 In terms of evidence, we all know that a single case report is of less value than a randomized trial. However, I believe it did demonstrate that sugammadex is not the solution for CICV where rocuronium has been used, and I commend the authors for sharing their experience with us.

I believe that sugammadex provides a false sense of security to the unwary, and would urge readers to carefully consider the findings of Sørenson and colleagues, before applying them to their practice. Furthermore, I thank Curtis and colleagues for highlighting the fact that the only path to re-oxygenation in a CICV situation does not equate to re-oxygenation as hoped.4

Reply from the authors

Editor—We appreciate Dr McCahon’s comments and his interest in our study.1 We definitely did not study a ‘can’t intubate, can’t ventilate’ (CICV) situation where oxygenation through the cricothyroid membrane may be the way to proceed when desaturation has occurred.

We agree that our findings should be interpreted carefully, but the CICV situation is fortunately very uncommon while intubation difficulty is much more frequent. Our data suggest that recovery of spontaneous ventilation is more rapid with rocuronium–sugammadex than with succinylcholine. Imagine the situation where a skilled intubator realizes early, well before desaturation will occur, that intubation will probably not be possible. In this case, sugammadex would be very useful if rocuronium has been used, and that choice would not be an option had he used succinylcholine.1–3

The recommendations made by NAP 4 are based on the data at the time they were written.4 Other studies must confirm or refute our findings, but the basis of any recommendation should always be questioned, so that they can constantly be improved. Hopefully, cricothyroid access will be needed less often if spontaneous ventilation can be established soon in a situation with intubation difficulty. In fact, cricothyroidotomy may not always be successful, and as reported in the NAP 4, 12 out of 19 cannula procedures failed.

Declaration of interest

None declared.


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None declared.


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