

Investigating sugammadex usage at a Regional Tertiary Hospital in accordance with state-wide guidelines: A Retrospective study

BACKGROUND

- Residual neuromuscular blockade is a common complication postoperatively and increases the risk of adverse patient outcomes.
- Sugammadex is designed to reverse the effects of the neuromuscular blockers rocuronium and vecuronium.
- The use of sugammadex is highly restricted in the statewide formulary and yet is the third highest unfunded drug expenditure at our site with increasing expenditure over the past two years. An audit was undertaken to review use compared to practice guidelines.

AIM

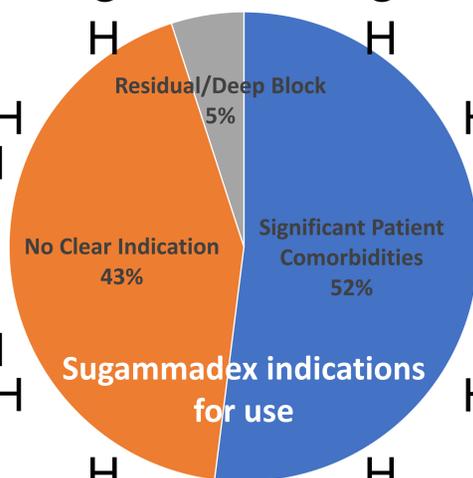
- To investigate the use of sugammadex over a one-month period to evaluate if use is consistent with approved formulary indications and discuss cost-effectiveness of practice at a tertiary health facility.

METHODS

- A retrospective study was conducted of patients administered sugammadex from 1st - 30th April 2021 using a data collection tool. Data was obtained from a sugammadex usage report, anaesthetic records and the electronic medical record. Documentation in these records was reviewed for each patient and data analysed to assess indications for use and adherence to statewide guidelines. Ethics approval was granted for the conduct of this audit.

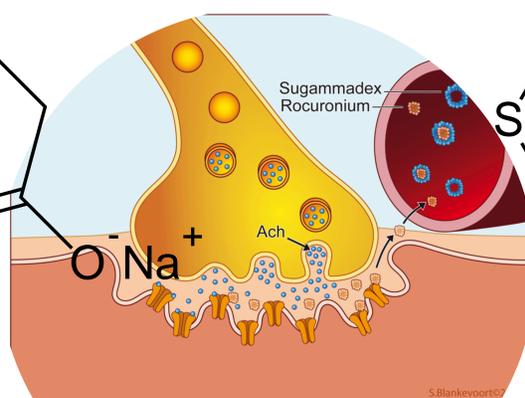
RESULTS

- The audit contained a total sample size of 202 patients. The results indicated that a large percentage of the sugammadex administered (43%) had no clear, documented indication.



DISCUSSION

- The lack of documentation relating to the clinical indication for use of sugammadex has prompted anaesthetic staff education to include detailed documentation for the indication of sugammadex use, to demonstrate that guidelines have been considered and administration is clinically appropriate.



CONCLUSION

- It is recommended, to reduce pharmacy costing and unnecessary usage of sugammadex, that further documentation should be recorded to specify the indication or clinical situation in which sugammadex is deemed appropriate for administration in each patient record.
- Furthermore, the use of quantitative neuromuscular transmission monitoring should be encouraged as a routine assessment in surgery to adequately assess RNMB and administer the smallest dose necessary for reversal of blockade.