

Stay Alert for Sugammadex Requests in NON-Perioperative Areas

Requests for sugammadex are cropping up in NONsurgical areas to reverse rocuronium or vecuronium after intubation.

We're used to seeing sugammadex as an option to reverse these neuromuscular blocking agents (NMBAs) after some surgical procedures.

But non-perioperative use can be tricky. Data in this setting are limited...and policies may not address use yet. Plus sugammadex is about \$130 for a 200 mg vial...or \$240 for a 500 mg vial.

Consider this approach to manage requests.

Limit to critical cases. For example, it may be too dangerous to wait for rocuronium to wear off after intubating a trauma or stroke patient who needs an emergent neurological exam in the ED.

Early neuro assessments may prevent unnecessary interventions (imaging, etc)...or facilitate important ones, such as placing an intracranial pressure monitor.

Keep in mind that rocuronium and vecuronium doses can last an hour or more...especially in patients with renal dysfunction.

Ask about establishing "train-of-four" monitoring in the ED...to help assess how much NMBAs have worn off.

There aren't established non-perioperative sugammadex doses, but if needed, think about starting with a flat dose of 200 mg for adults.

This is in the ballpark of the 2 mg/kg dose to reverse moderate blockade after surgery. Plus limited data suggest 200 mg may be enough in obesity...and reversal for a neuro exam may not need to be as robust as post-op reversal to facilitate extubation.

Consider repeating the dose in 5 minutes if there aren't neuro improvements compared to pre-intubation...AND sugammadex was started shortly after the NMBA was given.

Be prepared for hemodynamic changes...since sugammadex may cause a modest decrease in blood pressure and heart rate. Some experts suggest using a slow IV push instead of giving rapidly.

And there are reports of anaphylaxis, especially when combined with rocuronium.

Also educate that sugammadex may cause false increases in aPTT and other coagulation assays that won't lead to increased bleeding.

Keep in mind, sugammadex only reverses rocuronium or vecuronium.

If a patient needs an NMBA again within 4 hours after sugammadex...or longer with renal dysfunction...use a different NMBA than rocuronium or vecuronium. Otherwise give larger doses.

If your hospital decides to stock sugammadex in automatic dispensing cabinets in the ED, store vials in locked-lidded pockets. Require an indication and a blind count to remove.

Key References:

-Hyland SJ, Pandya PA, Mei CJ, Yehsakul DC. Sugammadex to Facilitate Neurologic Assessment in Severely Brain-Injured Patients: A Retrospective Analysis and Practical Guidance. Cureus. 2022 Oct 19;14(10):e30466.

Cite this document as follows: Article, Stay Alert for Sugammadex Requests in NON-Perioperative Areas, Hospital Pharmacist's Letter, March 2024

The content of this article is provided for educational and informational purposes only, and is not a substitute for the advice, opinion or diagnosis of a trained medical professional. If your organization is interested in an enterprise subscription, email sales@trchealthcare.com.

© 2024 Therapeutic Research Center (TRC). TRC and Hospital Pharmacist's Letter and the associated logo(s) are trademarks of Therapeutic Research Center. All Rights Reserved.

- Lentz S, Morrisette KM, Porter BA, et al. What is the Role of Sugammadex in the Emergency Department? J Emerg Med. 2021 Jan;60(1):44-53.
- Christodoulides A, Palma S, Zaazoue MA, et al. Utility of neuromuscular blockade reversal in the evaluation of acute neurosurgical patients: A retrospective case-series. J Clin Neurosci. 2022 Oct;104:82-87.
- Medication pricing by Elsevier, accessed Feb 2024.

Hospital Pharmacist's Letter. March 2024. No. 400319

Cite this document as follows: Article, Stay Alert for Sugammadex Requests in NON-Perioperative Areas, Hospital Pharmacist's Letter, March 2024

The content of this article is provided for educational and informational purposes only, and is not a substitute for the advice, opinion or diagnosis of a trained medical professional. If your organization is interested in an enterprise subscription, email sales@trchealthcare.com.

© 2024 Therapeutic Research Center (TRC). TRC and Hospital Pharmacist's Letter and the associated logo(s) are trademarks of Therapeutic Research Center. All Rights Reserved.