CORRESPONDENCE

Sugammadex in end-stage renal disease: too early for a “free-pass”

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To the Editor,

We read with interest the retrospective study by Paredes *et al.* evaluating the outcomes in an end-stage renal disease (ESRD) cohort receiving sugammadex (SGX).¹ The outcomes (complications) they evaluated need further comment and clarification.

The authors included hypersensitivity reactions, reintubation, hypoxemia, and pneumonia as the primary postoperative complications.¹ Nevertheless, they did not consider other well-recognized drug-related cardiac adverse effects such as bradycardia, particularly relevant in ESRD settings prone to hyperkalemia-induced conduction disturbances.^{2,3} In addition, reports of third-degree heart block, asystole, hypotension, coronary vasospasm, and cardiac arrest with SGX also warrant caution.²

While the primary complications (which manifest in 18 of their 219 patients) were stated to be unrelated to SGX, this finding needs to be carefully interpreted given the inability to rule out SGX as a contributing factor in a third (6/18) of the patients. Despite the explanation put forth in support of there being little significance to the neuromuscular blocking agent (NMBA) dissociation from

the prolonged exposure to SGX-NMBA complexes in ESRD, the authors cannot completely exclude the possibility of residual neuromuscular blockade in the absence of universal quantitative neuromuscular monitoring, particularly across the range of SGX doses employed.^{1,4} Moreover, circulatory shock (highlighted as a cause of primary complication) can itself hamper the SGX-NMBA complex clearance. In addition, their citation of volume-overload as the cause of postoperative hypoxemia is also far from objective.

Lastly, comparing their original cohort with a control group that had received neostigmine would have been a better method to account for the SGX-associated complications. Although the authors need to be commended for their study to potentially allow a more expansive role of SGX, issuing a “free-pass” to SGX in ESRD without more robust prospective data may have its own problems.

Disclosures None.

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References

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This letter is accompanied by a reply. Please see *Can J Anesth* 2021; this issue.

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