CORRESPONDENCE

Comments on “Perioperative glucocorticoid stress dosing: a survey of anesthesiologists and general internists”

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To the Editor,

The recent publication by Groleau *et al.* on practice patterns of Canadian specialists around perioperative glucocorticoid administration is timely and of significant importance.¹ This area of controversy and debate is one that extends to both adult and pediatric practices. Our group had similarly noted differences in practice patterns with perioperative care of children with primary adrenal insufficiency and conducted a survey of Canadian pediatric specialists, published this month in the *International Journal of Pediatric Endocrinology*.²

There are some clear differences in these two studies. We sought to ascertain practice patterns in children with known *primary* adrenal insufficiency due to congenital adrenal hyperplasia rather than secondary to exogenous exposure. Our study populations included pediatric anesthesiologists and those who provide pediatric anesthesia and compared them with pediatric endocrinologists. Our results highlighted fairly striking differences in perioperative corticosteroid administration recommendations. Pediatric endocrinologists were far more likely to recommend “stress” dose glucocorticoids.

Numerous factors contribute to the lack of consistent care practices for children and adults with adrenal insufficiency. These factors include, but are not limited to: differences in glucocorticoid formulations, varying underlying causes of adrenal insufficiency, varying degrees of surgical stress,

differences in anesthesia administration, and different clinical outcome measures. As a result, consensus guidelines, primarily driven from endocrinology, have been based largely on expert opinion guarding against worst case unforeseen events.³

Both of these practice pattern survey studies highlight the need for well-designed research studies to guide glucocorticoid dosing recommendations. Additionally, they draw attention to the need for further dialogue among specialty groups to provide optimized clinical care.

Conflicts of interest None declared.

Editorial responsibility This submission was handled by Dr. Hilary P. Grocott, Editor-in-Chief, *Canadian Journal of Anesthesia*.

References

1. Groleau C, Wong MJ, Hung O, Morin SN, Vautour L, Bessissow A. Perioperative glucocorticoid stress dosing: a survey of anesthesiologists and general internists. *Can J Anesth* 2018. DOI: <https://doi.org/10.1007/s12630-018-1219-7>.
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3. Allolio B. Extensive expertise in endocrinology. Adrenal crisis. *Eur J Endocrinol* 2015; 172: R115-24.

Editor's Note: The authors of the article: *Can J Anesth* 2018; DOI: <https://doi.org/10.1007/s12630-018-1219-7>, respectfully declined an invitation to submit a reply to the above letter.

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