138022 - PERI-OPERATIVE STEROID SUPPLEMENTATION FOR ADRENAL INSUFFICIENCY

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INTRODUCTION
Adrenal insufficiency is a disorder of the adrenal glands where they do not produce enough of certain hormones, mainly cortisol and aldosterone. Management of patients with adrenal insufficiency presenting for surgery in regards to steroid supplementation remains unclear. Congenital adrenal hyperplasia (CAH), one form of adrenal insufficiency, is a disorder involving a deficiency of an enzyme involved in the synthesis of cortisol, aldosterone, or both. Current guidelines are clear that high dose steroids are recommended for children with CAH undergoing anesthesia. High dose steroids have potential risks such as bradycardia, hypotension and asystole, increased risk of infection, blood glucose disorders, liver & gastrointestinal effects, and psychiatric syndromes. Given the risks identified, it is important to examine if current recommendations reflect clinical practice in providing optimal care for patients.

METHODS
Local research ethics board approval was obtained prior to study commencement. A cross-sectional survey was distributed following pretesting and pilot-testing. Invitation to participate in the survey was distributed via the Canadian Pediatric Anesthesia Society members’ email list. The initial email invitation was followed with two additional invitations to complete the survey. Responses were analyzed using standard tabulations.

RESULTS
55% of respondents would not provide stress-dose steroids for a cystoscopy and 21% would not do so for a laparotomy, despite the Endocrine Society Clinical Guidelines on CAH. See Table 1.

DISCUSSION
Our results demonstrate variation in clinical anesthetic practice regarding stress dose steroids in children with CAH undergoing anesthesia. Even when guidelines are provided, many respondents indicated they would not follow them. Our data also highlight that the decision to provide stress dose steroids is related to the proposed procedure. Finally, given the significant variation of practice, a need for future research is identified with an eye to change current practice recommendations.
References: