LETTER TO THE EDITOR

Perioperative Ketoacidosis with SGLT-2 Inhibitors: More Lessons to Learn

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Dear Editor,

In the recent issue of the Journal of Research and Innovation in Anesthesia, Kela presents an informative account of a 61-year-old diabetic undergoing coronary artery revascularization landing up in euglycemic diabetic ketoacidosis (EDKA), likely caused by dapagliflozin (a sodium-glucose cotransporter (SGLT-2) inhibitor, often associated with an accentuated risk of EDKA).[1,2] Meanwhile, the former has of late been ardently discussed in conjunction with diabetology[2]; attention of the readership needs to be drawn to the more recent reports of perioperative ketoacidosis with SGLT-2 inhibitors in nondiabetic settings.[3,4] Alongside Seki et al. reporting ketoacidosis amidst euglycemia in a nondiabetic patient receiving dapagliflozin for heart failure (HF),[3] the EMPA-KIDNEY collaborative group notably outlines ketoacidosis in a nondiabetic patient randomized to empagliflozin treatment.[4] Ahead of the increasing prescription of SGLT-2 inhibitors, given an accruing literature on their benefits in the HF and chronic kidney disease (CKD) subset,[2] the anesthesiologists need to simultaneously comprehend that in addition to the potential for reduced ketone excretion in the CKD cohort, the preoperative diuretic therapy (a commonplace in HF and CKD) further predisposes to perioperative dehydration. Indeed, Kela rightly elaborates on the role of dehydration and prolonged fasting in enhancing the corresponding predisposition to ketoacidosis.[1] Duly acknowledging the published clinical experience of the author,[1] it remains to be highlighted that such intriguing perioperative risks are only going to increasingly surface with more of our perioperative patients going on to receive novel drug therapies for a wide range of chronic illnesses.

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