Clinical Gastroenterology and Hepatology 2024;■:■–■

AGA SECTION

Multisociety Clinical Practice Guidance for the Safe Use of Glucagon-like Peptide-1 Receptor Agonists in the Perioperative Period

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Keywords: Glucagon-like peptide 1 receptor agonist; Gastroparesis; Procedure; Aspiration; Guidelines

Scope of Problem and Purpose

Glucagon-like peptide-1 receptor agonists (GLP-1RAs) have revolutionized the care of patients with metabolic disease due in part to the agonists' unique combination of effects, including decreasing hyperglycemia and enhancement of satiety.[1,2] GLP-1, a naturally secreted polypeptide, acts on the GLP-1R in multiple organs, including the pancreas, brain, heart, kidney, and stomach.[3] In the gastrointestinal tract, GLP-1 signals are part of the "ileal brake," increasing gastric emptying time.

An increasing safety concern has developed amongst providers regarding the perioperative use of GLP-1RA due to delayed gastric emptying and subsequent residual gastric contents on the day of the procedure despite traditional fasting.[4–6] There have been reports of pulmonary aspiration of gastric contents in patients on GLP-1RAs undergoing procedural sedation and/or general anesthesia.[7–9] Further, GLP-1RAs induce common side effects of nausea, vomiting, abdominal pain, and constipation, which may complicate the diagnosis and treatment of preoperative and postoperative disease states that share these symptoms.[10]

Despite limited data to construct evidence-based guidelines, multiple clinical organizations have recognized the need to provide practice guidance regarding the use of GLP-1RAs in the perioperative period.[4,11,12] There have been inconsistencies in these clinical care documents, leading to uncertainty with providers on how to provide safe, effective, and disease-equitable surgical and procedural care to patients taking GLP-1RAs. Therefore, the purpose of this clinical practice guide is to offer unified, multisociety guidance for safely managing patients needing GLP-1RA therapy regardless of indication, which currently includes type 2 diabetes, overweight and obesity, and heart failure, during the periprocedural period.

Recommendations

Recommendation 1

Use of GLP-1RAs in the perioperative period should be based on shared decision-making of the patient with procedural, anesthesia, and prescribing care teams balancing the metabolic need for the GLP-1RA with individual patient risk. This can be achieved by developing

1542-3565
https://doi.org/10.1016/j.cgh.2024.10.003