Preprocedure Care of Patients on Glucagon-like Peptide-1 Receptor Agonists: A Multisociety Clinical Practice Guidance

To the Editor:

There is an exponential increase in the use of glucagon-like peptide-1 receptor agonists (GLP-1RAs) in recent years due to their numerous clinical benefits.[1–3] However, GLP-1RAs delay gastric emptying with recent reports of aspiration of gastric contents during sedation and general anesthesia despite traditional, preoperative fasting requirements.[4] The optimal approach to mitigation of aspiration risk remains controversial because of sparse and inconsistent evidence. In 2023, the American Society of Anesthesiologists (Schaumburg, Illinois) published guidance for management of patients on GLP-1RAs with the primary aim of informing clinicians and patients of the heightened risk of aspiration and emphasizing shared decision-making.[5] Subsequently, other professional societies have also published recommendations for perioperative or periprocedure management of patients on GLP-1RAs.[6,7]

A multisociety consensus for the management of patients on GLP-1RAs was developed by representatives from the American Society of Anesthesiologists, the American Gastroenterological Association (Bethesda, Maryland), the American Society for Metabolic and Bariatric Surgery (Gainesville, Florida), the International Society of Perioperative Care of Patients with Obesity (Lynnwood, Washington), and the Society of American Gastrointestinal and Endoscopic Surgeons (Los Angeles, California).[8] This practice guidance emphasizes that the approach to managing patients on GLP-1RAs should be based on shared decision-making of the patient, the prescribing care team, the proceduralist or surgeon, and the anesthesiologist.[8] One of the first steps is preprocedure assessment of aspiration risk, performed with enough time in advance to identify patients at risk and allow for adjustments in periprocedural care if needed. Factors that may increase the risk of aspiration include the escalation phase of dosing, long-acting GLP-1RAs, higher doses, the presence of gastrointestinal symptoms of delayed gastric emptying (*e.g.*, nausea, vomiting, and abdominal discomfort), and medical conditions other than GLP-1 RA usage that might delay gastric emptying.[8]

The multisociety clinical practice guidance suggests that patients without risk factors may continue GLP-1RA therapy as usual in the perioperative period. Bridging therapy is not a viable option for most patients. For patients identified with an increased risk profile, use of a liquid diet for at least 24 h before the procedure to decrease the risk of retained gastric contents on the day of the procedure (as usually performed in patients undergoing colonoscopy and bariatric surgery) allows for the continuation of GLP-1RA therapy in the perioperative period.[8] If an unacceptable safety profile exists to continue GLP-1RA, patients may be asked to withhold therapy; however, this should be balanced with the risk of inducing a metabolic disease state, like hyperglycemia, that may complicate postprocedure patient care. The duration of holding should follow the guidance of the American Society of Anesthesiologists consensus-based guidance (*i.e.*, holding the day of surgery for daily formulations and a week before surgery for weekly formulations).[5]

On the day of procedure, if GLP-1RAs are continued, patients should again be assessed for symptoms suggestive of delayed gastric emptying. A point-of-care gastric ultrasound could also be considered to assess for retained gastric contents but presents technical and logistical difficulty. For patients determined to be at higher risk of aspiration on the day of procedure, rapid sequence induction of general anesthesia may be considered, if appropriate. These recommendations apply to all patients receiving GLP-1RAs, irrespective of the indication for GLP-1RA therapy.

In summary (table 1), this multisociety consensus provides guidance for management of patients on GLP-1RAs; however, it is not an evidence-based guideline. This approach emphasizes shared decision-making and provides recommendations for balancing continuation of GLP-1RA therapy perioperatively for surgery and procedures while minimizing the risk of aspiration.

Competing Interests

Dr. Joshi has received honoraria for consultation from Merck Sharpe and Dohme Inc. (Rahway, New Jersey), Vertex Pharmaceuticals (Boston, Massachusetts) and Haisco Pharmceuticals (Bridgewater, New Jersey). Dr. LaMasters has received honoraria for consulting and speaking from WL Gore (Newark, Delaware), Intuitive Surgical (Sunnyvale, California), Novo Nordisk (Bagavaerd, Denmark), and Ethicon Endosurgical (Rarity, New Jersey). Dr. Kindel declares no competing interests.

Table 1. Modified Summary Recommendations from the Multisociety Clinical Practice Guidance on Periprocedural Use of GLP-1RAs

Recommendation 1	Standardized preoperative assessment for risk of delayed gastric emptying (yes/no): 1. Presence of gastrointestinal symptoms suggesting delayed gastric emptying; recent dose increases, higher doses, and weekly administered medications may increase the risk of gastrointestinal symptoms 2. Medical conditions beyond GLP-1RA usage, which may also delay gastric emptying
Recommendation 2	Selective preoperative care plan based on delayed gastric emptying assessment and shared decision-making: 1. Continue GLP-1RA therapy preoperatively if there is no concern for delayed gastric emptying 2. If elevated risk of delayed gastric emptying exists: a. Recommend liquid only diet for at least 24 h before procedure with usual recommended fasting protocol, or b. Evaluation of the feasibility of medication bridging if GLP-1RAs need to be discontinued
Recommendation 3	On the day of procedure, reassess for delayed gastric emptying and mitigate risk if clinical concern: 1. Proceed with procedure as planned if there is no concern for delayed gastric emptying 2. If elevated risk of delayed gastric emptying exists: a. Consider point-of-care gastric ultrasound and/or b. Consider rapid sequence induction of general anesthesia, if appropriate c. Minimize procedure cancellation when possible

GLP-1RA, glucagon-like peptide-1 receptor agonist.

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Intraoperative Vasopressors and Delirium: Comment

To the Editor:

We read with a great interest the multicenter retrospective cohort study by Ma *et al.*[1] demonstrating higher odds of developing postoperative delirium with phenylephrine use in comparison to ephedrine for the management of intraoperative hypotension. Additionally, a dose-dependent effect of phenylephrine on the delirium following surgery under general anesthesia was observed, making authors to suggest that using ephedrine over phenylephrine for intraoperative hypotension may be useful in reducing the risk of postoperative delirium.