



Beyond blocks: Timely use of gastric POCUS by regional anesthesia team in assessment of a patient on GLP-1 therapy

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Background

- GLP-1 receptor agonists (GLP-1-RA) can lead to delayed gastric emptying and prolonged gastric fullness after fasting which can increase the risk of aspiration on induction of general anesthesia.
- Gastric point of care ultrasound (POCUS) can assess gastric fullness in this population with high sensitivity and specificity.
- Gastric POCUS is an accessible, economical way to reduce aspiration risk in patients on GLP-1-RA therapy or with unclear fasted time.

Case

- 62-year-old female with past medical history significant for obesity on Ozempic, hypertension, and a known history of post-operative nausea and vomiting (PONV) undergoing open reduction and internal fixation of the distal right fibula.
- The patient provided inconsistent reports of fasting time and last Ozempic dosing during initial evaluation by the acute pain service (APS) team.
- Gastric POCUS imaging performed by the APS team showed large volume of gastric contents consistent with a full stomach and the case was postponed for one week.
- Repeat gastric ultrasound was performed when the patient for surgery one week later. Ozempic was appropriately held prior to presentation and on US the absence of gastric contents was consistent with appropriate fasting.



Image 1. Ultrasound image of empty stomach.



Image 2. Ultrasound image of a full stomach.

Discussion

- GLP-1-RA are gaining traction as treatments for type 2 diabetes (DM2) and obesity.
 - FDA-approved GLP-1-RAs include liraglutide, dulaglutide, semaglutide, exenatide, lixisenatide, and albiglutide.
 - Current or recent use of any GLP-1-RA introduces safety considerations including increased aspiration risk due to delayed gastric emptying 2.
- Gastric POCUS can be used to assess stomach volumes in patients at risk for aspiration due to gastroparesis or less than recommended fasting time. This mode of evaluation is easily accessible at most institutions and is highly sensitive and specific for detecting the presence of gastric contents 5.
- This case clearly demonstrates that the use of gastric POCUS is a reliable way to assess the risk of aspiration in patients on GLP-1-RA therapy or with unclear fasted time.

Reference:

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