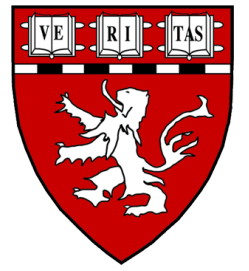




Preoperative gastric ultrasound to facilitate anesthetic management of cyclic vomiting syndrome during early pregnancy



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Chronic condition

Episodic pattern of nausea, vomiting, and abdominal pain

Occurring recurrently and interspersed with periods of symptom-free intervals.

Etiology: *Unclear*

Treatment

Identify lifestyle triggers

Antiemetic medications

Cyclic vomiting syndrome



Gastric emptying mechanism ?

| | |
|--------|-------|
| Rapid | √√√√√ |
| Normal | √√√ |
| Delay | √√ |

Anesthetic management

Avoidance of anesthetic agents that increase the risk of postoperative nausea and vomiting (PONV)

Administration of prophylactic antiemetic medication for PONV.

Strategies to reduce the risk of pulmonary aspiration.

Case study

G1P0 27 y.o. with cyclic vomiting syndrome, for D&E under anesthesia due to a missed abortion at 10wks of gestation

Appropriate NPO and no active day-of- procedure vomiting

Original anesthetic plan: Deep IV sedation (MAC)

Bedside gastric ultrasound: Unable to confirm empty antrum

Thus, rapid-sequence induction and general endotracheal anesthesia

Preoperative medications: Scopolamine patch, famotidine, and metoclopramide

The patient underwent uneventful extubation after meeting appropriate extubation criteria and discharged to home on the same day as the surgery.



A: Bedside gastric ultrasound in the supine position depicted hyperechoic content in anterior wall of gastric antrum



B: Bedside gastric ultrasound in the right lateral decubitus position revealed a hyperechoic content with acoustic shadow in the gastric antrum

A, Gastric Antrum; Ao, Descending aorta; L, Left lobe liver.

Teaching point: The interaction of cyclic vomiting syndrome with pregnancy and the dilemma of gastric ultrasound

Avoidance of anesthetic agents that increase the risk of postoperative nausea and vomiting

Administration of prophylactic antiemetic medication

?

The role of gastric ultrasound, particularly during pregnancy, in patients who otherwise meet appropriate NPO criteria