Our Antrum: Empty, Filled, Full

Peer review status:
No

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Article ID: WMC005622
Article Type: My opinion
Submitted on: 01-Aug-2020, 08:38:31 PM GMT   Published on: 17-Aug-2020, 07:56:54 AM GMT
Article URL: http://www.webmedcentral.com/article_view/5622
Subject Categories: ANAESTHESIA
Keywords: Preoperative Gastric Ultrasound; NPO; EGD; Colonoscopy; Sedation
How to cite the article: Gupta D, Kerwin M, David J. Our Antrum: Empty, Filled, Full. WebmedCentral ANAESTHESIA 2020;11(8):WMC005622
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Source(s) of Funding:
NOT APPLICABLE
Competing Interests:
NOT APPLICABLE
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My opinion

Inability to quantify gastric fullness preoperatively can be very frustrating for anesthesiologists. This is especially more so while managing gastrointestinal endoscopies, firstly because gastrointestinal endoscopies are primarily performed under moderate sedation with unprotected airways, and secondly because endoscopy suites have rapid turnovers discouraging routine use of preoperative gastric ultrasound screening for gastric fullness. Moreover, clinical research to prove that preoperative gastric ultrasound can work within endoscopy suites’ time-constraints is difficult to plan. Additionally, there can be healthcare costs if anesthesia plan is routinely changed from moderate sedation to general endotracheal anesthesia to avoid risk of pulmonary aspiration after preoperative gastric ultrasound raises suspicion for incompletely empty stomach. Still, as demonstrated in figure 1, the personal ultrasound images of empty, filled and full antrum can inspire healthcare institutions’ administrators to encourage clinical teams considering preoperative gastric ultrasound to screen their obtunded patients whose severity of preoperative nausea or vomiting cannot be easily quantified. Even though the naivety of clinical teams in appropriately screening gastric fullness with ultrasound may lead to increased incidence of general endotracheal anesthesia for gastrointestinal endoscopies, the opportunity to actually see antrum empty, filled or full in lean or obese patients while differentiating it from bowel, gall bladder and aorta will start serving its core purpose in due course of time. That core purpose for anesthesiologists is to not assume preoperative emptiness of their patients’ stomachs solely based on their patients’ symptomatology when preoperative gastric ultrasound screening can objectively confirm or refute their suspicions regarding pulmonary aspiration risks among their patients.[1-3]

Reference(s)