Peer Review File

Article information: http://dx.doi.org/10.21037/tgh-20-245.

Comment 1: Page 4 – Reviewer comment: "May be worth explaining this term" – regarding the term "acid pocket."

Reply 1: Thank you for this comment. The sentence now reads, "acid pocket (ie, the physiologic layering of acidic gastric secretions at the stomach fundus or gastroesophageal junction above a food bolus),..."

Comment 2: Page 4 – Reviewer comment: "Also change from supine to upright posture."

Reply 2: Thank you for this comment. This has been incorporated into the sentence, which now reads as: "These episodes become less frequent with age and the associated transition from supine to more upright posture, as well as with the transition to solid food."

Comment 3: Reviewer comment: "I think this is usually listed as multi-channel or multiple channel intraluminal impedance."

Reply 3: Thank you for this comment. All mentions of this testing modality have been changed to "combined multichannel intraluminal impedance."

Comment 4: Page 6 – Reviewer comment: "If almost half of infants with GERD show normal pH monitoring, then may need to amend the statement in previous paragraph about the high sensitivity of pH monitoring for GERD."

Reply 4: Thank you for this comment. The sentence has been qualified to read as "Esophageal pH monitoring has a relatively high sensitivity and specificity for GERD in comparison to other testing modalities, making it a long-standing key diagnostic technique."

Comment 5: Page 7 – Reviewer comment: "Should read, "can detect malrotation" or should read, "can detect rotational anomalies.""

Reply 5: Thank you for this comment. The sentence now reads as: "Most importantly, it allows for the evaluation of the location of the duodenojejunal junction and can therefore detect malrotation."

Comment 6: Page 12 – Reviewer comment: "What about the risk of carcinoids? His could be a good paragraph to comment on."

Reply 6: Thank you for this contribution. The following sentence based on the study cited under reference 44 has been added to the paragraph: "Although PPIs have been shown to increase serum gastrin concentration, they have not yet been shown to increase the risk of gastric or esophageal cancer, enterochromaffin-like cell hyperplasia, or carcinoid tumors."

Comment 7: Page 18 – Reviewer comment: "Can you mention the LINX, is used mostly in adults, but may play a role in pediatric patients, specially teenagers."

Reply 7: Thank you for this contribution. We have now added a paragraph regarding the current data surrounding magnetic sphincter augmentation. It is copied below:

"There is also currently limited data regarding the potential role for magnetic sphincter augmentation (MSA) in pediatric patients with GERD. Clinical trials evaluating the efficacy of MSA in the adult population, however, have demonstrated improvement of GERD symptoms, as well as decreased rates of gas-bloat, esophageal acid exposure, and PPI use after intervention.(71, 72) Ganz et al's prospective clinical trial, which included 85 patients at 14 centers in the United States and the Netherlands, evaluated the efficacy and safety profile of MSA over a 5-year follow-up period. In their patient population, PPI used decreased from 100 to 15.3%, moderate or severe regurgitation rates decreased from 57% to 1.2%, and gas-bloat decreased from 52% to 8.3% at five years. There were no reported device erosions, migrations, or malfunctions.(71) Rona et al. demonstrated that MSA remains efficacious even in the presence of a large hiatal hernia.(73)"

Comment 8: Page 20 – Reviewer comment: "Seems like an incomplete sentence."

Reply 8: Thank you for this comment. The sentence has been edited to read: "Failure of the wrap occurs in 2% of neurologically normal children and in approximately 12% of neurologically impaired children."