

SNAPPS WRITTEN ASSIGNMENT TEMPLATE

What is the self-directed learning issue that was identified in your oral presentation?

Why was an H2 antagonist indicated instead of proton pump inhibitor?

Research the self-directed learning issue and provide a summary of your findings which is fully supported by appropriate, scholarly, EBM references.

For patients with heartburn or gastroesophageal reflux complaints, initial first line treatment for non-concerning signs is to initiate lifestyle and dietary modification. As this patient was not obese and denied symptoms related to the types of food ingested, the initial pharmacological treatment indicated for mild to moderate GERD is to use an over-the-counter H2 blocker twice daily for 2 weeks. If the symptoms continue, repeat for an additional 2-4 weeks. If symptoms have not resolved at the end of the repeat dose, stop and initiate proton pump inhibitors daily (Fenstermacher & Hudson, 2024).

H2 receptor antagonists have been used for years for treatment of heartburn and GERD and are often available over the counter for short-term treatment of heartburn, dyspepsia, and hyperacidity. GERD continues to be one of the most common diseases seen by gastroenterologists and primary care physicians. While proton pump inhibitors continue to be the mainstay of treatment, there have been concerns and doubts about the safety of long-term use and over-prescribing of PPIs (Katz, et al., 2022). Functional heartburn is defined as an episodic retrosternal burning in the absence of pathological gastro-esophageal reflux, pathological motility disorders, or structural abnormalities and often present in younger, non-obese, and predominately female groups and may only respond positively to very high doses of proton pump inhibitors (Fass & Tougas, 2022).

For patients with GERD symptoms that include heartburn and regurgitation with no alarm symptoms, clinical guidelines suggest starting with an 8 week trial of empiric proton pump inhibitor once daily before meals with diagnostic endoscopy if the 8 week trial is not effective (Katz, et al., 2022). As this patient reported frequent nausea and heartburn but denies aggravating factors, it is possible that a 14-day course of H2 receptor antagonists may be just as beneficial as an 8-week trial of PPIs without the risk for side effects. Also, although PPIs are considered more effective than H2 receptor antagonists, the action onset of H2 receptor antagonists is much faster and only 8% more of patients reporting complete relief with PPI use, and the relief rate for famotidine was significantly higher for those with H. pylori infections present (Fujiwara, et al., 2005). H2 receptor antagonists decrease gastric acid secretion and work very well to treat uncomplicated GERD, gastric hypersecretion, and mild to moderate infrequent heartburn. H2 receptor antagonists also have significantly less impact on gut microbiota than PPIs and have minimal changes in oral-to gut transmission and composition, meaning that H2RAs have less effect on gut microbiome alteration than PPIs. H2RAs can be taken prophylactically 30 to 60 minutes before food intake or can be taken to relieve active symptoms (Nugent, Falks, & Terrell, 2024).

Placing the patient on a 14-day trial of famotidine allows the provider to reevaluate after that period and determine if a more comprehensive work up needs to be completed. If after the 14-day period, the provider can determine if they want to prescribe proton pump inhibitors for 8 weeks or if they want to refer to gastroenterology. If the provider chooses to move forward with PPIs, then they should reevaluate again at the 8 week mark and either gradually taper off