Purpose: The use of proton pump inhibitors (PPIs) has long been used as "gastrointestinal prophylaxis" in hospitalized patients. The effectiveness of these drugs in reducing stress ulcers in critical care patients is well documented and supported by published literature; however, as we demonstrated in an earlier study, PPIs are often inappropriately prescribed in the inpatient, non-ICU setting based on the FDA prescribing data. In this follow-up study, we attempt to reduce the number of inappropriate prescriptions by instituting an educational intervention.

Methods: A resident lecture was held outlining the current FDA approved indications for instituting pantoprazole. Pantoprazole was chosen as it is the formulary-preferred PPI at the hospital where the study took place. We then performed a retrospective analysis on 100 randomly selected patients admitted to the medical service over the next 3 months. The major outcome was the appropriate or inappropriate use of pantoprazole upon admission to the medical service, based on criteria from FDA prescribing guidelines. These data were then compared to data collected prior to the intervention.

Results: In our follow-up study, eight patients (8%) met the FDA criteria for pantoprazole administration. Seven of these patients received pantoprazole upon admission to the medical floor. Twenty-seven patients (27%) received pantoprazole despite not having any clear indication for its use. Sixty-five patients (65%) did not have an indication for pantoprazole administration and were not placed on pantoprazole. Overall, guidelines were followed in 72% of patients admitted to the general medical service over the three month period following our intervention compared to 51% of patients prior to our intervention. The results were shown to be statistically significant with a p = 0.001.

Conclusion: The results of our follow-up study showed statistically significant improvement in the appropriate use of pantoprazole in non-critically ill patients admitted to the medical ward. With further educational interventions to both resident and attending physicians, we expect to see further adherence to pantoprazole prescribing information. The recent institution of an electronic ordering system at the hospital where the study took place may be of further benefit by implementing a hard stop if pantoprazole is ordered without an indication or by having an order set available for those patients with a history warranting its use.

Methods: N/A
Results: N/A
Conclusion: N/A

CURRENT CATEGORY: G. Clinical Vignettes/Case Reports
CURRENT SUB-CATEGORY: H. Outcomes Research
PRESENTATION TYPE: Poster Only
ACG Research Grant Support: No
Supported by Industry Grant: No
Commercial Products or Services: No
Initiated Research: Investigator
Financial Relationships: Not Applicable
FDA Approval: Yes
Designed Study: Investigator
Abstract Author: Investigator

AUTH DESIGN: ACG Membership Status <font color="red">*</font>:
Neal Patel : ACG Member
Raffaele Bernardo : ACG Non-Member
Sejal Gandhi : ACG Member
Dina Khateeb : ACG Non-Member
Aleksey Tentler : ACG Non-Member
Neil Kothari : ACG Non-Member
(No Image Selected)
(no table selected)

**AVERAGE SCORE:** 5.25

**REVIEWER FLAGS:** (none)

**REVIEWER RECOMMENDATION CODE DESCRIPTION:** None

**REVIEWER COMMENTS:**
Somashekar Krishna: This is a study and not a case report.
Julia LeBlanc: [No Comments]
Girish Mishra: [No Comments]
Rayburn Rego: [No Comments]
Title: Spontaneous Idiopathic Pneumoperitoneum: A Recurrent Case with 13-Year Follow-Up of a Benign Condition

Presenter: Ayesha Godil

ABSTRACT BODY:

Purpose: Presence of intraperitoneal free gas usually mandates emergency laparotomy. This case of spontaneous idiopathic pneumoperitoneum with long term follow-up, however, suggests that conservative management can be safely approached in asymptomatic patients.

Case: An 86-yr old Caucasian male has presented with recurrent chronic abdominal bloating and dyspepsia since the late 1990s. He had a non-diagnostic colonoscopy and endoscopy in June 2001 and underwent a CT scan of the abd/pelvis in August 2001 which noted free air. He reported to the emergency room as a caution although he had no abdominal pain. Plain abdominal films confirmed air under the diaphragm. The patient's abdominal exam was completely benign; he was afebrile with a normal WBC count. His past history was unremarkable. The patient was admitted for observation. The next day he remained asymptomatic, tolerated his meal and was discharged for home. The patient remained fairly stable for the next several years and was not reevaluated until August 2006 for recurrent gas and bloating. Another CT abd/pelvis was done which again showed intraperitoneal free air. He was sent to the emergency room and his workup including barium SBFT was again negative. A repeat CT scan was performed in October 2006 to follow up on the pneumoperitoneum. This time, there was no evidence of the condition. In June 2007, patient was evaluated again for bloating. A lactose-free diet was instituted with some improvement. He was significantly better during his September 2008 visit but presented again to his primary care physician's office with abdominal bloating and distention in October 2011. Another CT abd/pelvis was performed which revealed massive pneumoperitoneum. This was patient's third CT that had shown pneumoperitoneum over the course of ten years. Around this time, patient was also dealing with advancing dementia. After discussing with the family, a decision was made to avoid further testing. To date, the patient is living comfortably in an assisted living as he deals with his progressive dementia.

Discussion: Over 90% of cases of pneumoperitoneum are the result of perforation of an intra-abdominal viscus requiring prompt surgical intervention. In 5-10% of cases, the condition does not reflect perforation and results from a source that does not require emergent surgery. Causes of spontaneous pneumoperitoneum include postoperative, intrathoracic, abdominal, gynecologic, trauma, and idiopathic. These cases are usually managed conservatively. This case is unique in that no etiology could be identified over a 13-year follow-up period. Conservative treatment should be considered as the preferred choice in patients with spontaneous idiopathic pneumoperitoneum.

Methods: N/A

Results: N/A

Conclusion: N/A

AUTH DESIG: ACG Membership Status <font color="red">^</font>: Ayesha Godil : ACG Non-Member
Jeffrey Frost : ACG Non-Member

(No Image Selected)
AVERAGE SCORE: 3.67
REVIEWER FLAGS: (none)
REVIEWER RECOMMENDATION CODE DESCRIPTION: None
REVIEWER COMMENTS:
David Hass: [No Comments]
Charlene Le Pane: [No Comments]
Renee Young: [No Comments]
Rowen Zetterman: [No Comments]
Purpose: A 62-year-old man with a history of small bowel pseudo-obstruction requiring long term total parenteral nutrition (TPN) with Intralipid® which he received via a tunneled central venous catheter presented to the clinic. He was well until approximately 6 weeks prior to admission when he developed fever and generalized malaise. He was hospitalized elsewhere on two prior occasions, treated empirically with antibiotics, and his blood cultures were negative. On his third admission, he had a catheter related bloodstream infection with *Staphylococcus epidermidis* requiring catheter exchange and intravenous antibiotics. Unfortunately, he presented again with his usual symptoms of fever, chills, and generalized malaise for a fourth time. Blood cultures were negative and he remained afebrile during hospitalization and was discharged home. During the admission, he was not given Intralipid due to a nationwide shortage. At home, he developed fevers, but only on days he received Intralipid infusion. He was admitted a fifth time and blood cultures eventually grew *Malassezia*. His tunneled catheter was removed and he was treated with fluconazole. *Malassezia* species are lipophilic fungi that colonize the skin and can be associated with catheter related bloodstream infections, typically in the setting of TPN with Intralipid. Specialized culture techniques utilizing sterilized lipid solutions are required to make the diagnosis, so a high index of suspicion must be maintained for patients receiving TPN and experiencing intermittent fevers.

Methods: N/A

Results: N/A

Conclusion: N/A