

# **Common Household Item as an Unusual Etiology of Bowel Perforation** Usama Abu- Heija, Rami Dalbah, Omar Al Ta'ani, Mohammad Darweesh, Venkata Vedantam East Tennessee State University, Internal Medicine department

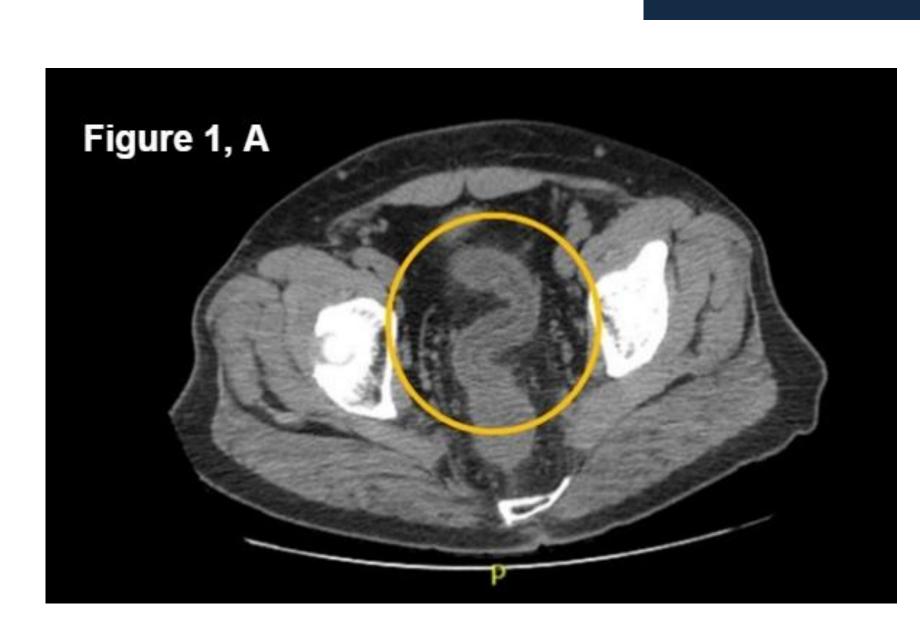
# Introduction

- Colonic perforation is defined by fullthickness injury to the colon wall with various etiologies.
- Presentation can vary according to the etiology of perforation.
- > Patients usually describe abdominal pain as either localized or generalized, depending on the extent of spillage of intestinal contents and degree of peritonitis.
- Bowel perforation severity can range from a simple and medically managed condition to a life-threatening surgical emergency.
- > We present a case of colonic perforation from an unsuspected etiology.

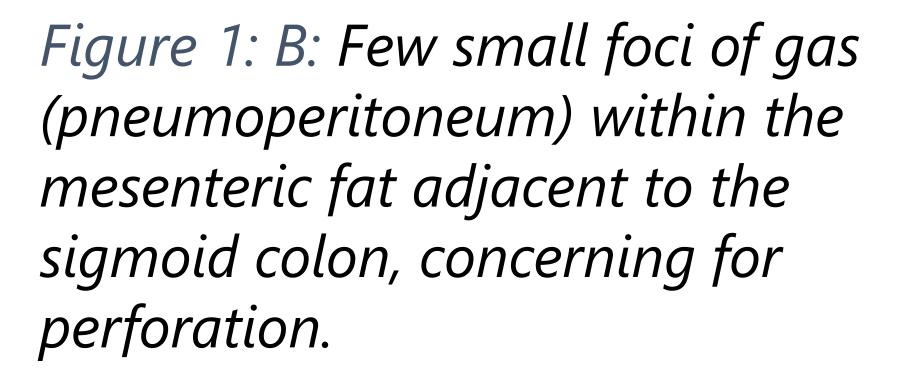
### **Case Presentation**

> A 51-year-old male presented to the hospital complaining of proctalgia, and rectal bleeding which had started two hours after self-administering an enema at home. Soon after, patient realized he erroneously had used bleach instead of his usual homemade rainwater enema.

- > On examination, the patient had severe abdominal and rectal tenderness with visible dried blood around the anus.
- > A CT scan of the abdomen revealed moderate circumferential wall thickening involving the sigmoid colon and rectum (Figure 1, A), in addition to pneumoperitoneum within the mesenteric fat adjacent to the sigmoid colon (Figure 1,B).
- > The surgical team assessed the patient and was deemed not a good surgical candidate. Medical management was recommended with NPO, analgesia, intravenous fluids, and antibiotics.
- > Patient was discharged home after a few days following resolution of symptoms and extensive counseling.



# Imaging



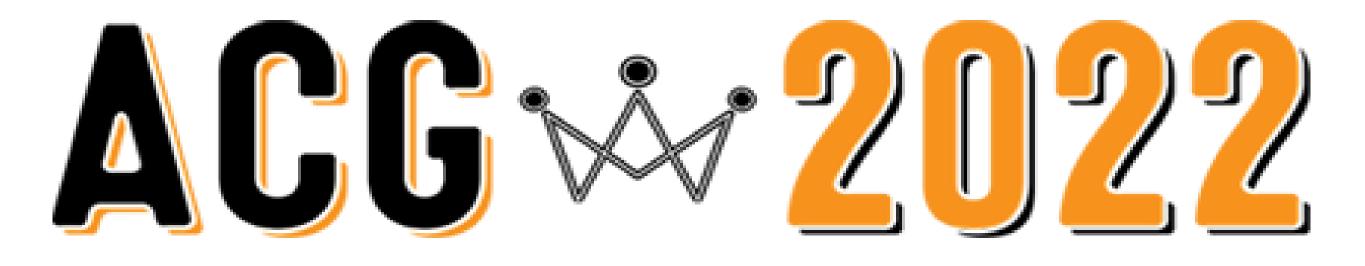


Figure 1: A: Moderate circumferential wall thickening involving the sigmoid colon and rectum, concerning for inflammatory colitis.







# Conclusion

- Sodium hypochlorite is the compound typically found in household bleach, primarily used for its antimicrobial properties for cleaning purposes.
- > Typical household bleach is a strong alkaline with a pH of 11-13, and ingestion is associated with severe esophageal injury, with severity determined by the amount and concentration of the ingested compound.
- Bleach enemas have been fraudulently marketed as a medical treatment for autism, with several reports of devastating outcomes in young children.
- > This case demonstrates the gravity of using bleach enemas as medical treatment due to the potential for severe colitis and perforation, as seen in our patient.

# **Contact information**

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