

INTRODUCTION

- In the past hydrogen peroxide was used for the management of meconium ileum and fecal impaction, and it was often used as a home remedy for constipation
- The use of hydrogen peroxide enemas was abandoned due to harmful effects such as colitis, stricture, and perforation.
- Chemical-induced proctitis can mimic presentation of other conditions such as ulcerative colitis, pseudomembranous colitis, and ischemic colitis.
- Here, we present a case of hydrogen peroxideinduced proctitis in a young male

CASE PRESENTATION

- A young male with no significant past medical history presented with hematochezia and loose stool for 3 days.
- Patient was in his usual state of health until he used hydrogen peroxide enema with unknown concentration for constipation and had receptive anal intercourse afterwards.
- The episodes of hematochezia were associated with tenesmus and suprapubic and left lower quadrant pain, but he denied perianal pain.
- He denied history of sexually transmitted disease, perianal itching, or discharge.

PROCTITIS SECONDARY TO HYDROGEN PEROXIDE IN A YOUNG MALE

Catherine Choi¹, Brooke Baker¹, Fredella Lee¹, Youssef Botros² ¹Division of Gastroenterology & Hepatology, Department of Medicine, Rutgers New Jersey Medical School, Newark, NJ ²Department of Medicine, Jersey City Medical Center, Jersey City, NJ

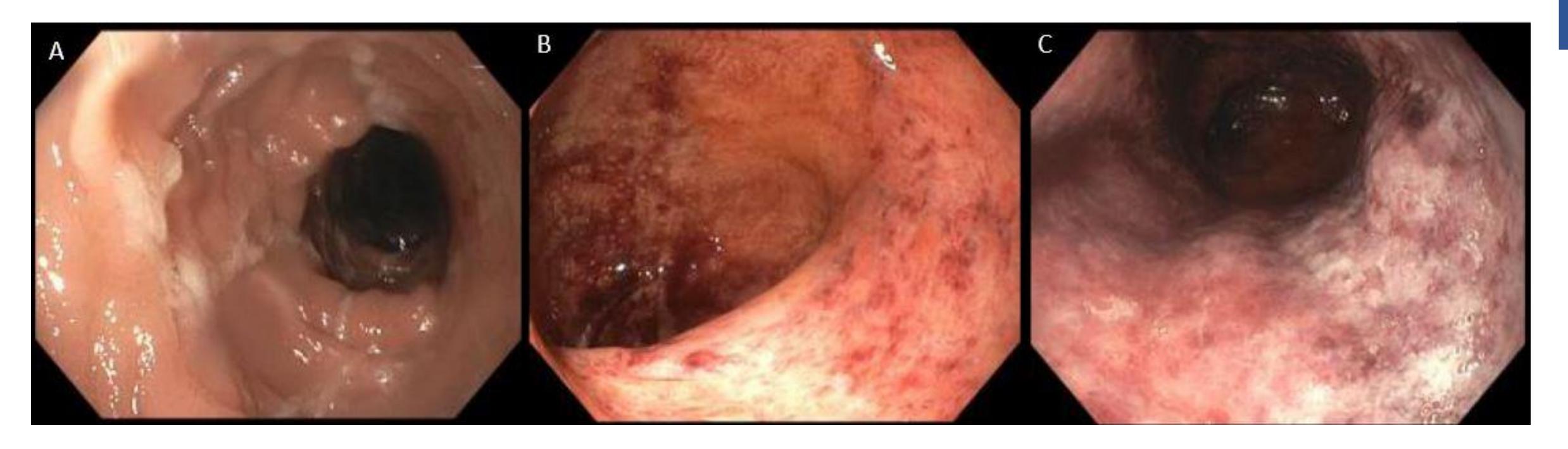


FIGURE 1: A) normal mucosa, distal descending B) sigmoid colon, erythematous mucosa with contact mucosal bleeding C) rectum, erythematous and friable mucosa



FIGURE 2: CT findings, thickening of the wall of the distal sigmoid colon and of the rectum. Perirectal straining was present.

- He denied history of arthritis, skin rash or oral ulcers.
- CT showed proctitis and distal sigmoid colitis.
- rectosigmoid and in the rectum.
- Histopathological examination showed polypoid colonic mucosa with hyperplastic changes.
- Patient had clinical improvement with mesalamine enema.

Patient underwent sigmoidoscopy which showed severe, diffuse colitis seen in the distal

DISCUSSION

It's unclear if anal intercourse after the administration of hydrogen peroxide was linked to pathogenesis of proctitis in this case. Clinical manifestations of hydrogen peroxideinduced proctitis range from self-limited colitis to strictures and perforation, which can lead to other serious complications The pathogenesis is mainly from corrosive damage, secondary to penetration of the chemical with subsequent formation of oxygen.

• Most patients recover with conservative therapy.

CONCLUSION

Endoscopic and CT findings of hydrogen peroxide-induced colitis can mimic other types of colitis including pseudomembranous colitis, ulcerative colitis, and ischemic colitis.

• Therefore, obtaining detailed, pertinent history is critical to make a right diagnosis.

CONCLUSION

•Gan SI, Price LM. Waiting-list induced proctitis: the hydrogen peroxide enema. *Can J Gastroenterol* 2003; **17**(12): 727-729 [PMID: 14679422 DOI: 10.1155/2003/716490] •Mandzhieva B, Khan M, Rashid MU, Shobar R, Khan AH. Hydrogen Peroxide Enema-induced Proctitis in a Young Female: A Case Report. *Cureus* 2019; **11**(12): e6468 [PMID: 32025395 PMCID: PMC6984182 DOI: 10.7759/cureus.6468] •Tas A, Aydin YY, Arhan M, Koklu S. Hydrogen peroxide exposure mimicking ulcerative proctitis. *Dig Liver Dis* 2011; **43**(4): 331-332 [PMID: 21130717 DOI: 10.1016/j.dld.2010.10.016]