Ascension Genesys Hospital

Pseudomembranous Colitis Presenting as Acute Colonic Obstruction in a Patient with Multiple Myeloma: A Case Report

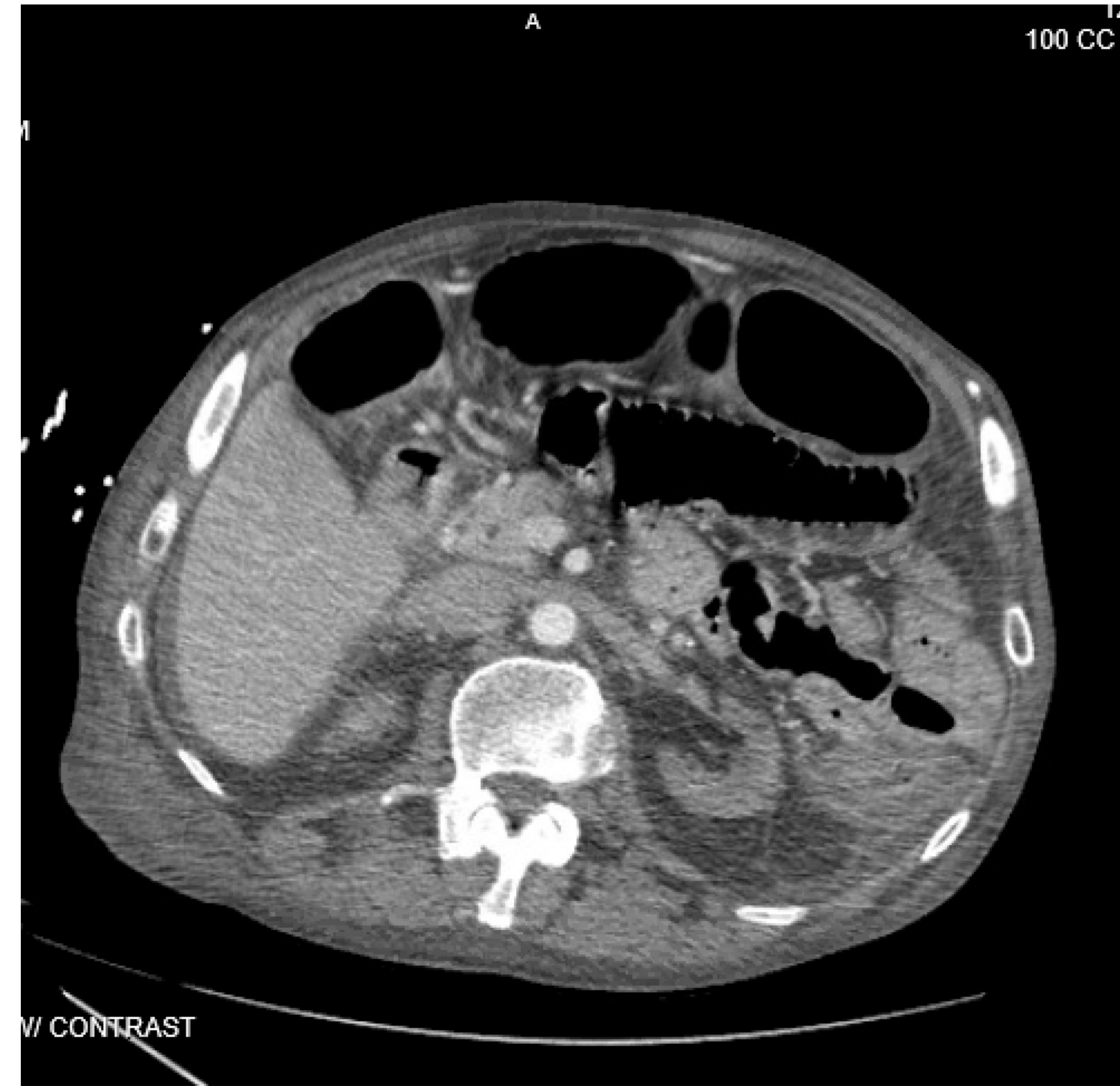
Fady Banno MD, MSc[1], Kyle Knight DO[1], Brandon Wiggins DO MPH[1], Carlos Diola[1], Nathan Landesman DO[2]

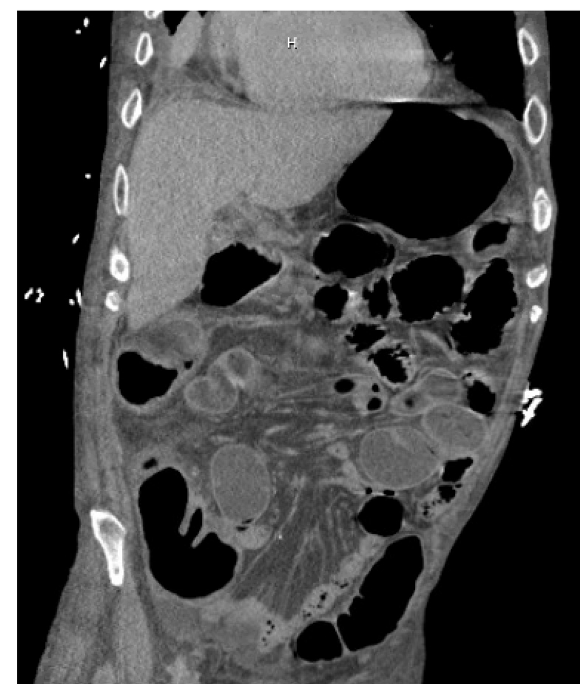
[1]Department of Internal Medicine, Ascension Genesys Hospital, Grand Blanc [2]Division of Gastroenterology, Department of Internal Medicine, Ascension Genesys Hospital, Grand Blanc, MI

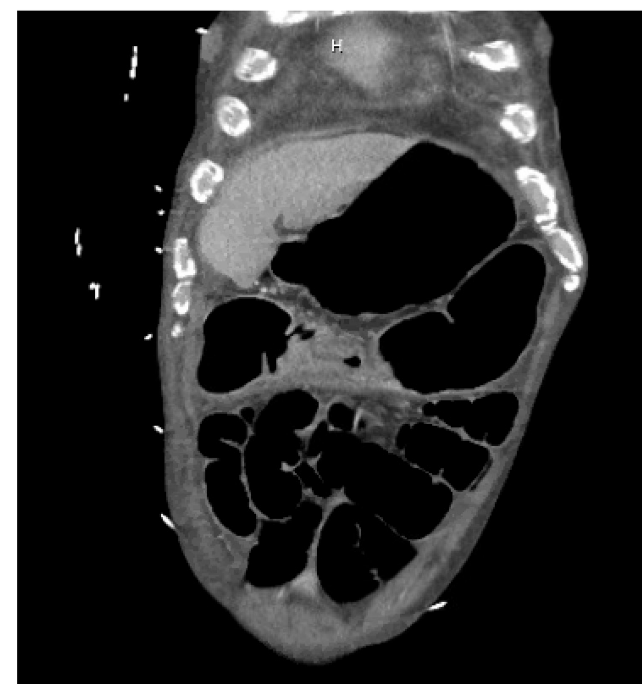
Ascension Genesys Hospital

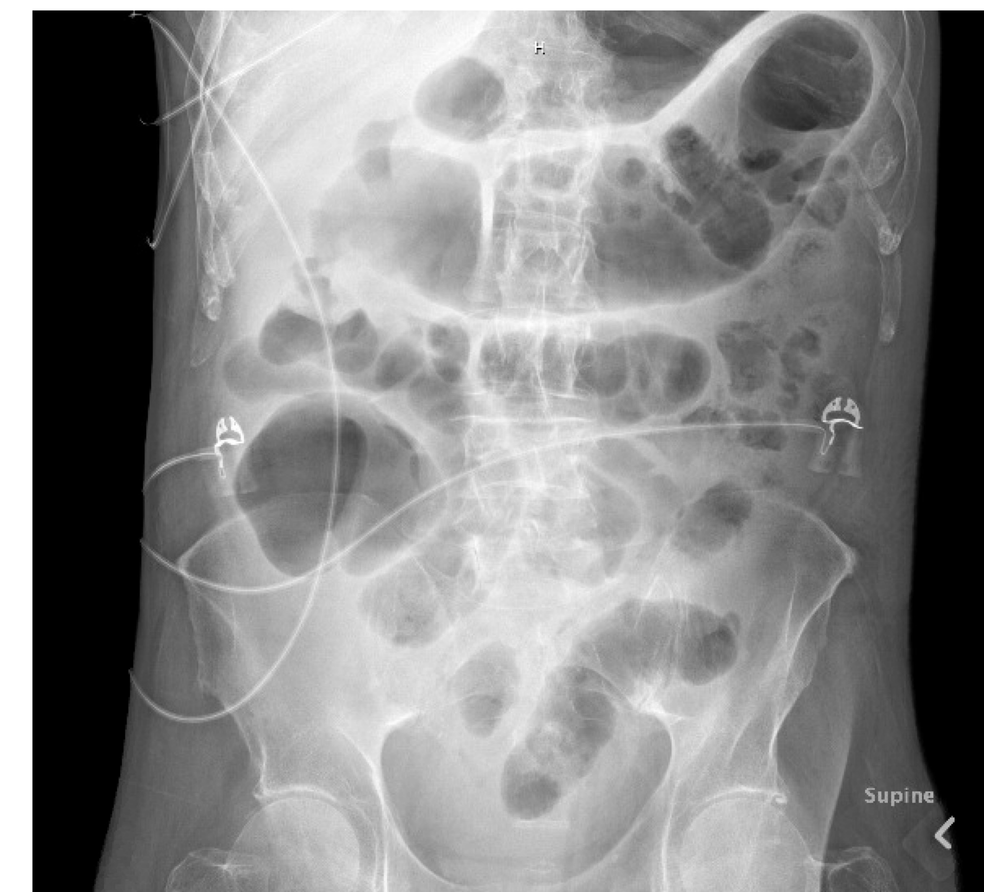
Abstract & Introduction

The manifestations of pseudomembranous colitis (PMC) are usually in a hospitalized individual presenting with diarrhea and fever in the context of a clostridioides difficile infection (CDI). However, in this case we describe a Multiple Myeloma patient who presents with acute colonic obstruction as the first sign of PMC. This is a 63-year old patient that came into the emergency department after having bouts of diarrhea, abdominal pain, nausea and vomiting for one week. Vital signs revealed the patient to be hemodynamically unstable and non-febrile. Lab work revealed normal leukocyte count, and hypokalemia. Computed tomography (CT) of the abdomen and pelvis displayed the development of a bowel obstruction secondary to stricture visualized at mid transverse colon, suspicious for primary colon cancer. PMC should be on the differential in patients with a baseline inflammatory state with CT findings suggesting apple core lesion or obstruction.









Case Presentation & Discussion

63-year-old male with past medical history of ESRD on hemodialysis, chronic hypotension on midodrine 10 mg, and multiple myeloma who presented to the emergency department complaining of 1 week of diarrhea and intermittent abdominal pain as well as nausea and vomiting that started in the last couple of days prior to his admission. Patient says that he has been having diarrhea for the last week. He had one episode of dark stools 2 days prior to his presentation. Patient has been having nausea and episodes of nonbilious vomiting. He has not been able to tolerate anything orally. was starting to have worsening abdominal pain and episodes of vomiting so was taken to the emergency department. In the emergency department he was hypotensive with BP of BP 47/30, HR 102, RR 17, 98.2 °F, 95% on room air. He had taken his home midodrine medication as well as was given to 2 separate doses of 250 mL of fluid for a total of 500 mL. Patient was not fluid responsive to raise his blood pressure and was started on Levophed drip.

Lab work and imaging showed a white blood cell count of 6.3. He had a lactic acid of 1.2. Potassium was 3.0, magnesium of 1.7. Elevated troponin of 0.12 along with A. fib on EKG. CT abdomen/pelvis showed development of bowel obstruction likely secondary to colonic stricture seen within the proximal transverse colon which is highly suggestive of primary colon cancer. Chest x-ray showed a right lower lobe consolidation which can possibly be chronic.

Cultures ordered and he was started on Vancomycin and Zosyn for broad spectrum coverage. Patient was admitted to the ICU. Nephrology consulted for end-stage renal disease. General surgery, GI and hematology & oncology consulted for possible primary colon cancer and large bowel obstruction.

Patient developed severe abdominal pain and was taken for exploratory laparotomy which did not show an apple core lesion but a decompressed descending colon which was very edematous. The surgeon encountered pseudomembranes throughout the descending and transverse colon. Extended right hemicolectomy secondary to toxic megacolon was performed.

Patient started on rectal vancomycin 500mg rectally for fulminant c. difficile colitis. Unfortunately, the patient passed away 12 hours after the procedure.

Conclusions

PMC should be on the differential in patients with a baseline inflammatory state with CT findings suggesting apple core lesion or obstruction. Friable colon secondary to pseudomembranous colitis or ischemia could cause the intestines to collapse easily which may show an apple core lesion on CT scan.

Contact

Fady Banno, MD PGY-II
Ascension Genesys Hospital
Email: fady.banno@ascension.org
Phone: (248)-961-2232

References

1. Nomura K, Fukumoto K, Shimizu D, Okuda T, Yoshida N, Kamitsuji Y, et al. Pseudomembranous colitis presenting as acute colonic obstruction without diarrhea in a patient with gastric Burkitt lymphoma. World Journal of Gastroenterology : WJG [Internet]. 2005 May 5 [cited 2022 Jun 4];11(17):2681. Available from: /pmc/articles/PMC4305767/

2. Farooq PD, Urrunaga NH, Tang DM, von Rosenvinge EC. Pseudomembranous Colitis. Dis Mon [Internet]. 2015 [cited 2022 Jun 4];61(5):181. Available from: /pmc/articles/PMC4402243/

3. Cowan AJ, Green DJ, Kwok M, Lee S, Coffey DG, Holmberg LA, et al. Diagnosis and Management of Multiple Myeloma: A Review. Vol. 327, JAMA - Journal of the American Medical Association. American Medical Association; 2022. p. 464–77.