

INTRODUCTION

Pseudomembranous colitis (PMC) is most commonly caused by *Clostridium difficile* (C.Diff). The incidence of C.Diff related PMC is 3-8% and increasing. Other than C.Diff, ischemia, infections, medications, and inflammatory conditions can cause PMC. We report a case of pseudomembranous colitis-tested negative PCR for C.Diff

CASE PRESENTATION

52-year-old female with a past medical history of hypothyroidism, asthma, and polysubstance abuse (history of chronic heroin, cocaine, benzodiazepine, alcohol, and cigarette use) with History of chronic intermittent diarrhea due to Opioid withdrawal presented to the emergency department with bloody watery diarrhea of 3-4 times in a day for 5 days.

On initial evaluation, the patient's vital signs are stable. The abdomen is diffusely tender on physical examination with increased tenderness in the left lower quadrant.

The patient was empirically treated with IV ceftriaxone, IV metronidazole, and PO vancomycin. Stool for *C. difficile* PCR was negative three times on three different days. Stool culture was negative for *Salmonella*, *Shigella*, *Campylobacter*, or *E. coli* O157:H7. Fecal lactoferrin quantification was 320.72 $\mu\text{g}/\text{mL}$. The patient underwent sigmoidoscopy, which showed discontinuous areas of ulcerated mucosa covered with yellowish punctate membrane with stigmata of recent bleeding in the entire examined colon.

Biopsy of the colon showed focal active colitis with superficial crypt erosion and focal adherent mucopurulent material negative for crypt abscesses and granulomas, consistent with pseudomembranous colitis. The patient was continually treated with supportive care including IV fluids and bowel rest. Her diet was advanced, and her diarrhea improved.

Labs	
WBC	15,900/ μ
Neutrophils	90.2%
AST	80 U/L
ALT	41 U/L
ALP	97 U/L
T.Bilirubin	0.5 mg/dL
Lactic acid	0.9 mmol/L
CRP	11.9 mg/dL
UDS	+ for Cocaine

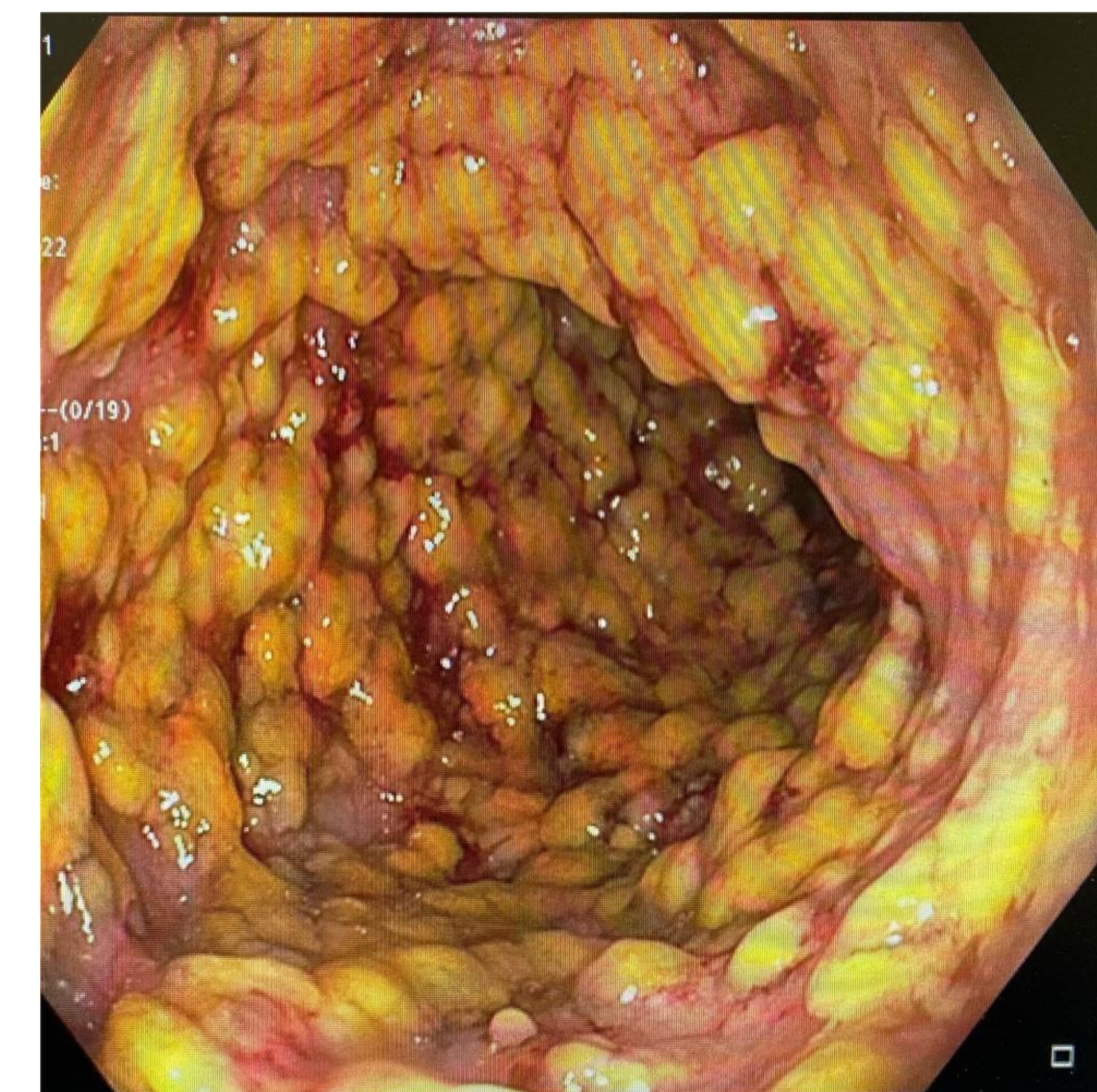


Figure 1: Discontinuous areas of ulcerated mucosa covered with yellowish punctate membrane with stigmata of recent bleeding in the entire examined colon

DISCUSSION

Other than C.Diff, we propose keeping other differentials of pseudomembranous colitis is essential. Other infections from *S. aureus*, *E. coli*, *Shigella* and Strongyloidiasis may also cause PMC. Non-infectious causes of PMC include chemical endoscope cleaning agents, intestinal ischemia, drug abuse from cocaine, inflammatory bowel disease, and microscopic colitis to avoid over-usage of antibiotics and focus on targeted therapy.