

INTRODUCTION

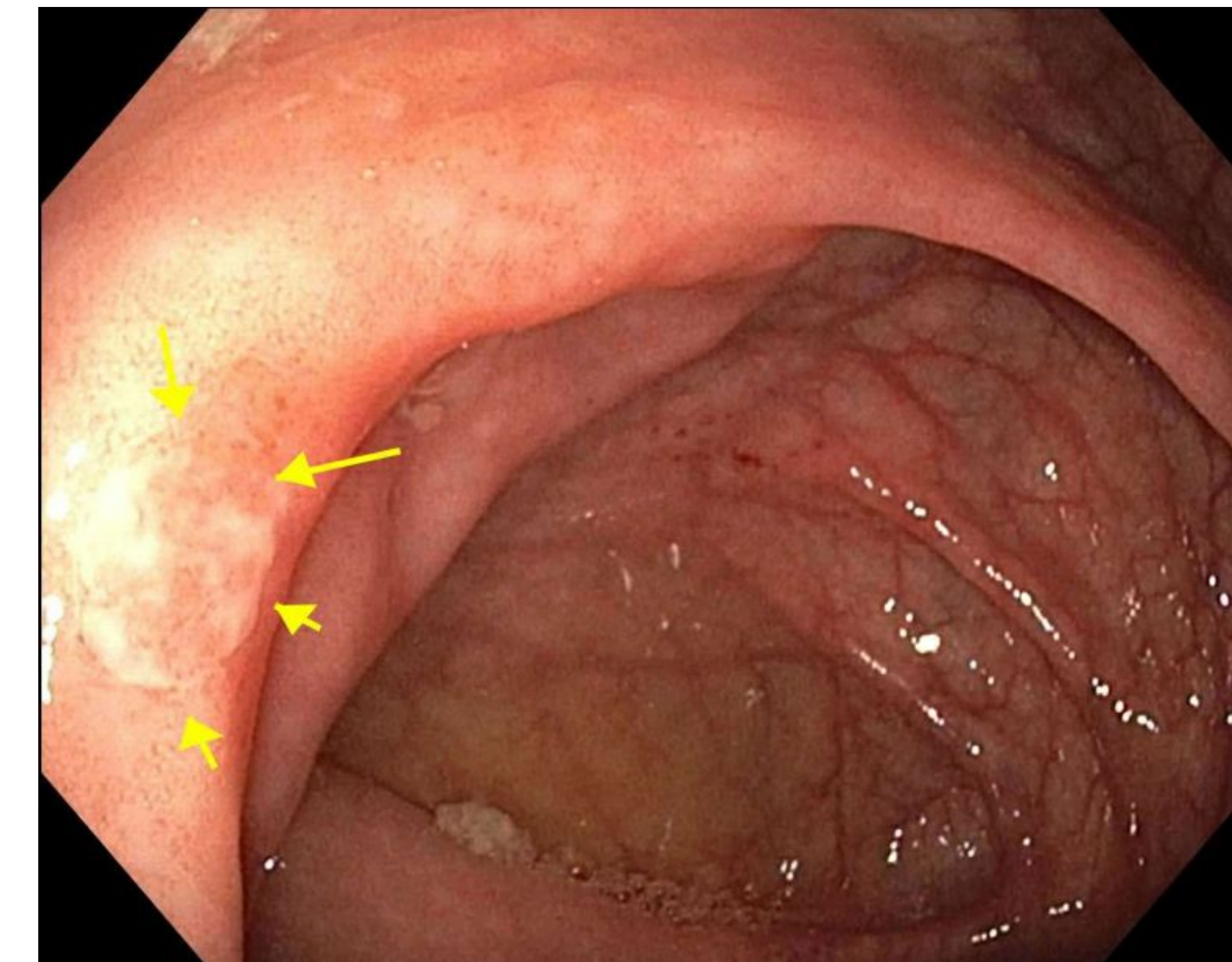
- *Salmonella* species usually cause foodborne gastroenteritis, but can invade colonic mucosa causing colitis
- This colitis can have overlapping histologic and endoscopic features with Crohn's disease¹
- This mimicry has been seen with *Salmonella enterica* serotypes Enteritidis,² Veneziana,³ and Java⁴

CASE PRESENTATION

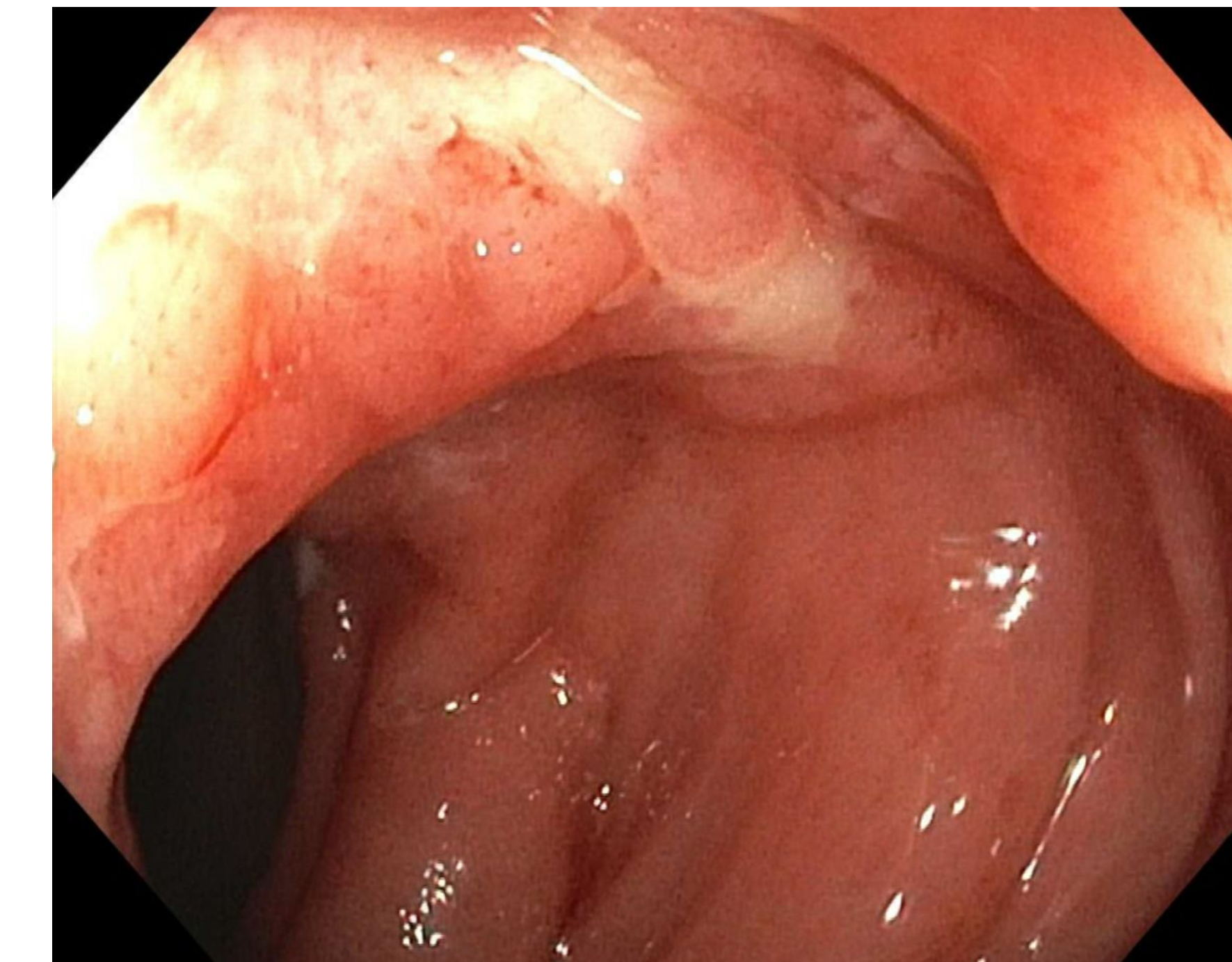
- A 22 year old woman with no past medical history presented with six weeks of abdominal pain, bloody diarrhea, nocturnal stooling, and subjective fevers
- She had no recent travel, antibiotic use, or sick contacts and no family history of inflammatory bowel disease (IBD)
- Physical exam was notable for a diffusely tender abdomen
- Laboratory studies were remarkable for a Hgb 11.9 g/dL, C-reactive protein 8.3 mg/dL (CRP; normal 0.0-0.8 mg/dL), and fecal calprotectin >1250 µg/g (normal ≤49 µg/g)
- Infectious workup was negative other than a stool culture positive for *Salmonella* ser Saintpaul

ENDOSCOPIC EVALUATION

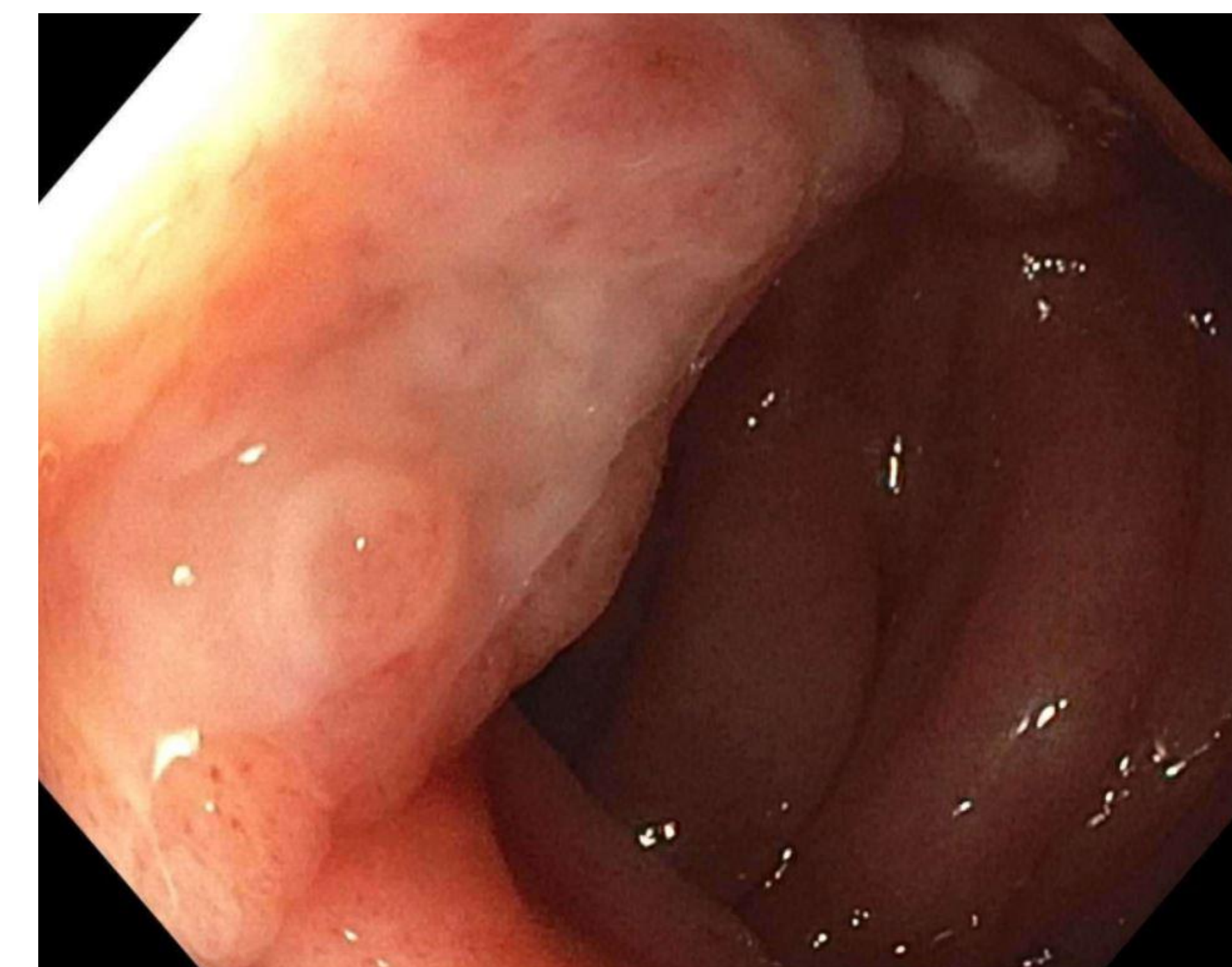
- Colonoscopy revealed patchy erythematous and edematous mucosa throughout the colon. She had numerous ulcers from the ileocecal valve to the descending colon (figure 1)
- Histology showed moderate to severe active colitis without chronic features



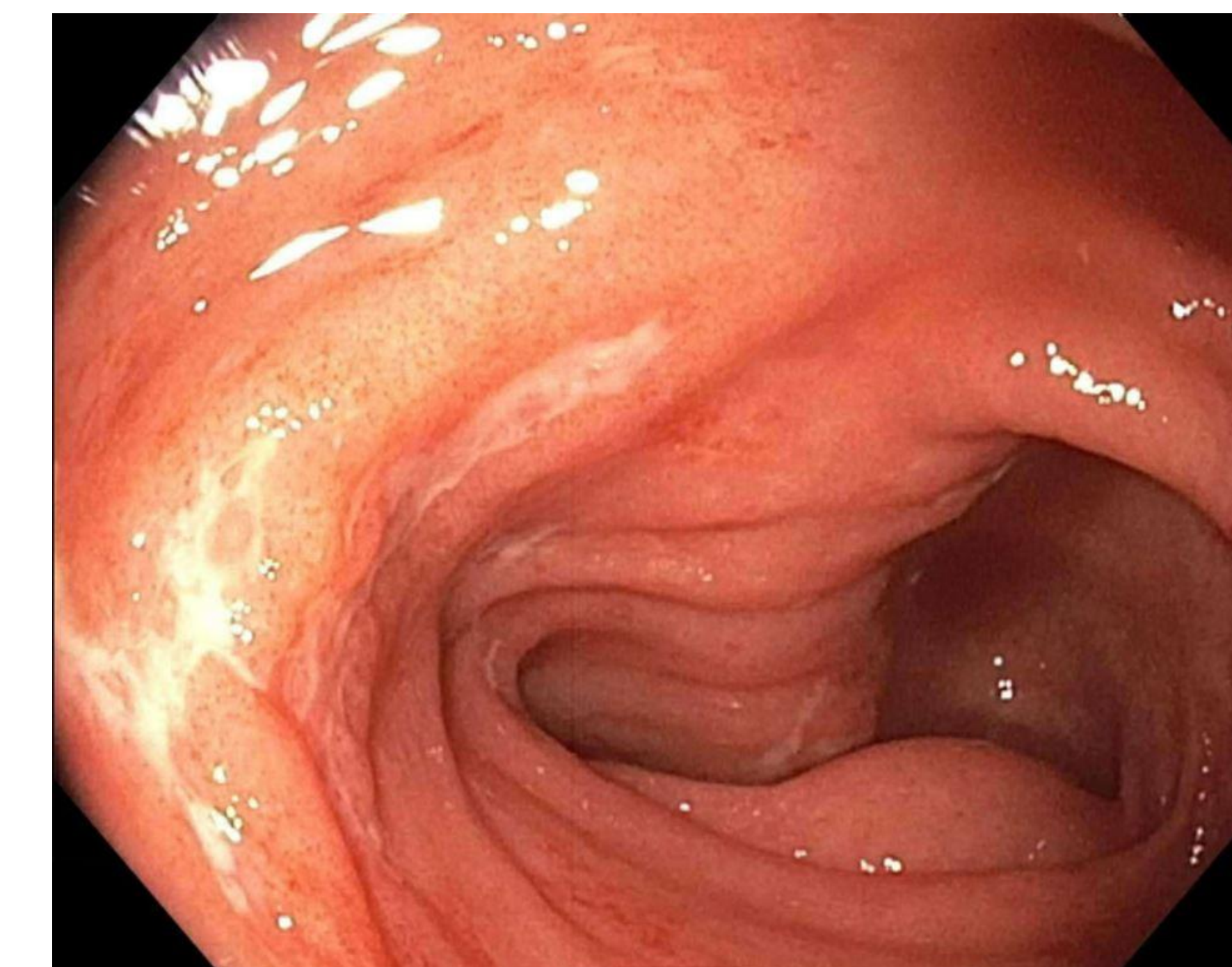
Ileocecal Valve



Transverse Colon



Descending Colon



Descending Colon

Figure 1: Initial colonoscopy showed ulceration and patchy erythema and edema throughout the colon

HOSPITAL COURSE

- Based on her initial presentation and endoscopic findings, she was diagnosed with Crohn's disease. The *Salmonella* Saintpaul found on stool culture was thought to be a superimposed infection
- The patient declined further inpatient treatment, so she was discharged with a prednisone taper and ciprofloxacin 500 mg twice daily for two weeks

OUTPATIENT FOLLOW-UP

- On two week follow up, her symptoms were much improved and repeat CRP and fecal calprotectin were both normal
- Plans were initially made to begin vedolizumab for definitive Crohn's treatment, but it was decided to reassess her disease before starting
- Six months later, she had normal fecal calprotectin and a normal colonoscopy and has remained asymptomatic since

DISCUSSION

- We present a case of *Salmonella* ser Saintpaul colitis mimicking Crohn's disease
- *Salmonella* Saintpaul has been reported to cause bacteremia,⁵ splenic abscesses,⁶ meningitis,⁷ and spondylitis,⁸ but not to mimic Crohn's disease before
- Treating infectious colitis along with definitive treatment for Crohn's disease can muddy the diagnostic picture if remission is attributed to Crohn's treatment instead of microbial eradication
- Repeat laboratory and endoscopic evaluation saved our patient from starting long term immunosuppressive treatment

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