

SURGICAL PATHOLOGY REPORT [SYNTHETIC]

ACCESSION #: UC-2025-11528

DATE OF PROCEDURE: 04/23/2025

DATE OF REPORT: 04/27/2025

REQUESTING PHYSICIAN: Dr. Michael Weiss, Gastroenterology

PATHOLOGIST: Dr. Jeremy Hansen, Anatomic Pathology

CLINICAL HISTORY:

32 year old female with recent onset history of bloody diarrhea, abdominal pain, and urgency. Colonoscopy showed continuous erythema and friability from rectum to splenic flexure. Clinical suspicion for ulcerative colitis.

SPECIMEN RECEIVED:

- A. Rectum, biopsy
- B. Sigmoid colon, biopsy
- C. Descending colon, biopsy
- D. Transverse colon, biopsy
- E. Ascending colon, biopsy
- F. Terminal ileum, biopsy

GROSS DESCRIPTION:

- A. Received in formalin labeled "rectum" are 4 tan-pink tissue fragments measuring 6 mm in aggregate.
- B. Received in formalin labeled "sigmoid colon" are 2 tan-pink tissue fragments measuring 5 mm in aggregate.
- C. Received in formalin labeled "descending colon" are 2 tan-pink tissue fragments measuring 4 mm in aggregate.
- D. Received in formalin labeled "transverse colon" are 6 tan-pink tissue fragments measuring 5 mm in aggregate.
- E. Received in formalin labeled "ascending colon" are 3 tan-pink tissue fragments measuring 6 mm in aggregate.

F. Received in formalin labeled "terminal ileum" are 6 tan-pink tissue fragments measuring 3 mm in aggregate.

All specimens are entirely submitted in 1 cassette(s).

MICROSCOPIC DESCRIPTION:

A. Rectal mucosa shows fulminant active chronic inflammation with marked epithelial injury, neutrophilic cryptitis, and basal lymphoplasmacytosis. The inflammatory process is limited to the mucosa without evidence of granulomas. Occasional Paneth cell metaplasia is noted. In addition to the chronic inflammatory changes, there are numerous neutrophils and pseudomembranes suspicious for superimposed *Clostridioides difficile* infection.

B. Sigmoid colonic mucosa shows severe active chronic inflammation with severe cryptitis, crypt architectural distortion, and Paneth cell metaplasia. The inflammatory process is limited to the mucosa without evidence of granulomas. Occasional Paneth cell metaplasia is noted.

C. Descending colonic mucosa shows moderate active chronic inflammation with diffuse neutrophilic cryptitis, crypt abscesses, and epithelial injury. The inflammatory process is limited to the mucosa without evidence of granulomas. Mucosal edema and congestion are present.

D. Transverse colonic mucosa shows mild to moderate active chronic inflammation with crypt architectural distortion and crypt abscesses. Reactive epithelial changes are seen adjacent to areas of active inflammation.

E. Ascending colonic mucosa shows mild to moderate active chronic inflammation with crypt architectural distortion and crypt abscesses. Occasional apoptotic bodies are present in crypts.

F. Terminal ileal mucosa shows mild non-specific inflammation without architectural distortion. No evidence of chronic inflammatory bowel disease identified in this section. Terminal ileal mucosa shows mild active inflammation with neutrophilic cryptitis, likely representing backwash ileitis.

DIAGNOSIS:

A. Rectum, biopsy:

- fulminant active chronic colitis with crypt architectural distortion and goblet cell depletion
- fulminant consistent with ulcerative colitis

- No dysplasia identified
- No evidence of cytomegalovirus (CMV) infection

B. Sigmoid colon, biopsy:

- severe active chronic colitis with crypt architectural distortion and goblet cell depletion
- Features suggestive of superimposed *Clostridioides difficile* infection
- severe consistent with ulcerative colitis
- No dysplasia identified

C-E. Descending, transverse, and ascending colon, biopsies:

- moderate active chronic colitis with crypt architectural distortion
- Features consistent with ulcerative colitis
- No dysplasia identified

F. Terminal ileum, biopsy:

- Mild non-specific inflammation
- Mild active ileitis, consistent with backwash ileitis in the setting of ulcerative colitis
- No evidence of inflammatory bowel disease

COMMENT:

The histologic findings show a pattern of continuous chronic active colitis with greatest severity in the distal colon and rectum, with relative sparing of the proximal colon. The absence of granulomas, transmural inflammation, and terminal ileal involvement are features favoring ulcerative colitis over Crohn's disease. Correlation with clinical, endoscopic, and radiologic findings is recommended for definitive classification. Clinical correlation and follow-up biopsies are recommended to monitor disease activity and treatment response. The histologic features suggestive of superimposed *Clostridioides difficile* infection should be correlated with clinical presentation and stool testing. The mild ileal inflammation in the context of pancolitis is consistent with backwash ileitis, which can be seen in ulcerative colitis and does not necessarily indicate Crohn's disease.

SPECIAL STUDIES:

Cytomegalovirus (CMV) immunohistochemistry is negative for viral inclusions. Gram stain highlights numerous gram-positive bacilli morphologically consistent with *Clostridioides difficile*.

This is a synthetic educational pathology report created for AI training purposes. It does not represent a real patient case.