

SURGICAL PATHOLOGY REPORT [SYNTHETIC]

ACCESSION #: UC-2025-31787

DATE OF PROCEDURE: 04/19/2025

DATE OF REPORT: 04/22/2025

REQUESTING PHYSICIAN: Dr. Tracy Williams, Gastroenterology

PATHOLOGIST: Dr. Brian Sims, Anatomic Pathology

CLINICAL HISTORY:

63 year old female with recent onset history of bloody diarrhea, abdominal pain, and urgency. Colonoscopy showed severe ulceration and spontaneous bleeding from rectum to descending colon. 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 5 tan-pink tissue fragments measuring 5 mm in aggregate.
- B. Received in formalin labeled "sigmoid colon" are 6 tan-pink tissue fragments measuring 3 mm in aggregate.
- C. Received in formalin labeled "descending colon" are 4 tan-pink tissue fragments measuring 5 mm in aggregate.
- D. Received in formalin labeled "transverse colon" are 4 tan-pink tissue fragments measuring 4 mm in aggregate.
- E. Received in formalin labeled "ascending colon" are 6 tan-pink tissue fragments measuring 6 mm in aggregate.

F. Received in formalin labeled "terminal ileum" are 6 tan-pink tissue fragments measuring 2 mm in aggregate.

All specimens are entirely submitted in 3 cassette(s).

MICROSCOPIC DESCRIPTION:

A. Rectal mucosa shows fulminant 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 apoptotic bodies are present in crypts.

B. Sigmoid colonic mucosa shows moderate to 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. Mucosal edema and congestion are present. In addition to the chronic inflammatory changes, there are numerous neutrophils and pseudomembranes suspicious for superimposed *Clostridioides difficile* infection. The inflammatory pattern shows overlapping features of both ulcerative colitis and Crohn's disease.

C. Descending colonic mucosa shows mild to moderate active chronic inflammation with crypt branching, crypt atrophy, and focal crypt abscesses. The inflammatory process is limited to the mucosa without evidence of granulomas. Lamina propria shows increased plasma cells and lymphocytes.

D. Transverse colonic mucosa shows moderate active chronic inflammation with marked crypt architectural distortion, numerous crypt abscesses, and complete goblet cell depletion. Reactive epithelial changes are seen adjacent to areas of active inflammation.

E. Ascending colonic mucosa shows mild active chronic inflammation with diffuse crypt architectural distortion, crypt abscesses, and goblet cell depletion. No evidence of dysplasia is identified. Terminal ileal mucosa shows mild active inflammation with neutrophilic cryptitis, likely representing backwash ileitis.

F. Terminal ileal mucosa shows minimal increase in lamina propria lymphoplasmacytic infiltrates, likely reactive. No evidence of chronic inflammatory bowel disease identified in this section.

DIAGNOSIS:

A. Rectum, biopsy:

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

- Mild active ileitis, consistent with backwash ileitis in the setting of ulcerative colitis
- fulminant consistent with ulcerative colitis
- No dysplasia identified
- No evidence of cytomegalovirus (CMV) infection

B. Sigmoid colon, biopsy:

- moderate to severe active chronic colitis with crypt architectural distortion and goblet cell depletion
- Features of chronicity consistent with inflammatory bowel disease, with overlapping features of both UC and CD
- Features suggestive of superimposed *Clostridioides difficile* infection
- moderate to severe consistent with ulcerative colitis
- No dysplasia identified

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

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

F. Terminal ileum, biopsy:

- Mild non-specific inflammation
- 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. The lack of granulomas, ileal involvement, and transmural inflammation favors ulcerative colitis over Crohn's disease. The histologic features suggestive of superimposed *Clostridioides difficile* infection should be correlated with clinical presentation and stool testing. The histologic findings show overlapping features of both ulcerative colitis and Crohn's disease. This pattern may represent an 'indeterminate colitis' and correlation with clinical, endoscopic, and serologic markers is strongly recommended for further classification. 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:

Periodic acid-Schiff (PAS) stain is negative for fungal organisms. 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.