

SURGICAL PATHOLOGY REPORT [SYNTHETIC]

ACCESSION #: UC-2025-72311

DATE OF PROCEDURE: 04/20/2025

DATE OF REPORT: 04/23/2025

REQUESTING PHYSICIAN: Dr. Robin Khan, Gastroenterology

PATHOLOGIST: Dr. Timothy Cunningham, Anatomic Pathology

CLINICAL HISTORY:

39 year old female with 5 year history of bloody diarrhea, abdominal pain, and urgency. Colonoscopy showed moderate inflammation with patchy erosions 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 5 mm in aggregate.
- B. Received in formalin labeled "sigmoid colon" are 3 tan-pink tissue fragments measuring 8 mm in aggregate.
- C. Received in formalin labeled "descending colon" are 3 tan-pink tissue fragments measuring 8 mm in aggregate.
- D. Received in formalin labeled "transverse colon" are 6 tan-pink tissue fragments measuring 3 mm in aggregate.
- E. Received in formalin labeled "ascending colon" are 3 tan-pink tissue fragments measuring 5 mm in aggregate.

F. Received in formalin labeled "terminal ileum" are 4 tan-pink tissue fragments measuring 8 mm in aggregate.

All specimens are entirely submitted in 6 cassette(s).

MICROSCOPIC DESCRIPTION:

A. Rectal mucosa shows severe active chronic inflammation with marked epithelial injury, neutrophilic cryptitis, and basal lymphoplasmacytosis. The inflammatory process is limited to the mucosa without evidence of granulomas. Reactive epithelial changes are seen adjacent to areas of active inflammation. Terminal ileal mucosa shows mild active inflammation with neutrophilic cryptitis, likely representing backwash ileitis.

B. Sigmoid colonic mucosa shows 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. Occasional apoptotic bodies are present in crypts.

C. Descending colonic mucosa shows mild to moderate active chronic inflammation with diffuse crypt architectural distortion, crypt abscesses, and goblet cell depletion. The inflammatory process is limited to the mucosa without evidence of granulomas. Reactive epithelial changes are seen adjacent to areas of active inflammation.

D. Transverse colonic mucosa shows mild to moderate active chronic inflammation with crypt branching, crypt atrophy, and focal crypt abscesses. Lamina propria shows increased plasma cells and lymphocytes. In addition to the chronic inflammatory changes, there are numerous neutrophils and pseudomembranes suspicious for superimposed *Clostridioides difficile* infection.

E. Ascending colonic mucosa shows mild active chronic inflammation with crypt architectural distortion and crypt abscesses. Occasional Paneth cell metaplasia is noted.

F. Terminal ileal mucosa shows normal small intestinal mucosa with preserved villous architecture. No evidence of chronic inflammatory bowel disease identified in this section.

DIAGNOSIS:

A. Rectum, biopsy:

- severe active chronic colitis with crypt architectural distortion and goblet cell depletion
- Mild active ileitis, consistent with backwash ileitis in the setting of ulcerative colitis
- severe consistent with ulcerative colitis

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

B. Sigmoid colon, biopsy:

- moderate active chronic colitis with crypt architectural distortion and goblet cell depletion
- Features suggestive of superimposed *Clostridioides difficile* infection
- moderate 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 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.