

SURGICAL PATHOLOGY REPORT [SYNTHETIC]

ACCESSION #: UC-2025-14693

DATE OF PROCEDURE: 04/17/2025

DATE OF REPORT: 04/20/2025

REQUESTING PHYSICIAN: Dr. Jeffery McCoy, Gastroenterology

PATHOLOGIST: Dr. Terry Day, Anatomic Pathology

CLINICAL HISTORY:

28 year old female with 10 year history of bloody diarrhea, abdominal pain, and urgency. Colonoscopy showed severe friability, superficial ulcerations, and pseudopolyps throughout the 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 2 tan-pink tissue fragments measuring 2 mm in aggregate.
- B. Received in formalin labeled "sigmoid colon" are 5 tan-pink tissue fragments measuring 7 mm in aggregate.
- C. Received in formalin labeled "descending colon" are 5 tan-pink tissue fragments measuring 6 mm in aggregate.
- D. Received in formalin labeled "transverse colon" are 3 tan-pink tissue fragments measuring 8 mm in aggregate.
- E. Received in formalin labeled "ascending colon" are 5 tan-pink tissue fragments measuring 8 mm in aggregate.

F. Received in formalin labeled "terminal ileum" are 6 tan-pink tissue fragments measuring 8 mm in aggregate.

All specimens are entirely submitted in 5 cassette(s).

MICROSCOPIC DESCRIPTION:

A. Rectal mucosa shows fulminant active chronic inflammation with severe cryptitis, crypt architectural distortion, and mucosal ulceration. The inflammatory process is limited to the mucosa without evidence of granulomas. 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. Terminal ileal mucosa shows mild active inflammation with neutrophilic cryptitis, likely representing backwash ileitis.

B. Sigmoid colonic mucosa shows mild to 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.

C. Descending colonic mucosa shows 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. Marked decrease in goblet cell population.

D. Transverse colonic mucosa shows moderate active chronic inflammation with diffuse crypt architectural distortion, crypt abscesses, and goblet cell depletion. Surface epithelium shows reactive changes.

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

F. Terminal ileal mucosa shows no significant pathologic abnormality. 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:

- mild to moderate active chronic colitis with crypt architectural distortion and goblet cell depletion
- mild to moderate 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
- Features suggestive of superimposed *Clostridioides difficile* infection
- 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 pattern of inflammation is consistent with ulcerative colitis as evidenced by the continuous mucosal involvement with greatest intensity distally. 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.