

SURGICAL PATHOLOGY REPORT [SYNTHETIC]

ACCESSION #: UC-2025-99543

DATE OF PROCEDURE: 05/01/2025

DATE OF REPORT: 05/05/2025

REQUESTING PHYSICIAN: Dr. Colleen Evans, Gastroenterology

PATHOLOGIST: Dr. Dana Tucker, Anatomic Pathology

CLINICAL HISTORY:

19 year old female with 2 month history of bloody diarrhea, abdominal pain, and urgency. Colonoscopy showed circumferential ulceration and pseudopolyps from rectum to mid-transverse 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 4 tan-pink tissue fragments measuring 5 mm in aggregate.
- B. Received in formalin labeled "sigmoid colon" are 3 tan-pink tissue fragments measuring 2 mm in aggregate.
- C. Received in formalin labeled "descending colon" are 5 tan-pink tissue fragments measuring 8 mm in aggregate.
- D. Received in formalin labeled "transverse colon" are 2 tan-pink tissue fragments measuring 5 mm in aggregate.
- E. Received in formalin labeled "ascending colon" are 3 tan-pink tissue fragments measuring 4 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 4 cassette(s).

MICROSCOPIC DESCRIPTION:

A. Rectal mucosa shows moderate to 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. No evidence of dysplasia is identified.

B. Sigmoid colonic mucosa shows severe active chronic inflammation with marked crypt architectural distortion, numerous crypt abscesses, and complete goblet cell depletion. The inflammatory process is limited to the mucosa without evidence of granulomas. Basal plasmacytosis is prominent. Terminal ileal mucosa shows mild active inflammation with neutrophilic cryptitis, likely representing backwash ileitis.

C. Descending 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. Occasional Paneth cell metaplasia is noted.

D. Transverse colonic mucosa shows mild active chronic inflammation with marked crypt architectural distortion, numerous crypt abscesses, and complete goblet cell depletion. Surface epithelium shows reactive changes.

E. Ascending colonic mucosa shows mild active chronic inflammation with crypt architectural distortion and crypt abscesses. Mucosal edema and congestion are present.

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. In addition to the chronic inflammatory changes, there are numerous neutrophils and pseudomembranes suspicious for superimposed *Clostridioides difficile* infection.

DIAGNOSIS:

A. Rectum, biopsy:

- moderate to 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

- moderate to severe 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 to severe 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 histologic findings show classic features of ulcerative colitis with diffuse crypt architectural distortion and diffuse mucosal inflammation. 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.