

SURGICAL PATHOLOGY REPORT [SYNTHETIC]

ACCESSION #: UC-2025-47141

DATE OF PROCEDURE: 05/03/2025

DATE OF REPORT: 05/05/2025

REQUESTING PHYSICIAN: Dr. Lori Stanley, Gastroenterology

PATHOLOGIST: Dr. James Ballard, Anatomic Pathology

CLINICAL HISTORY:

59 year old female with 3 week 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 4 tan-pink tissue fragments measuring 8 mm in aggregate.
- B. Received in formalin labeled "sigmoid colon" are 2 tan-pink tissue fragments measuring 6 mm in aggregate.
- C. Received in formalin labeled "descending colon" are 3 tan-pink tissue fragments measuring 6 mm in aggregate.
- D. Received in formalin labeled "transverse colon" are 2 tan-pink tissue fragments measuring 4 mm in aggregate.
- E. Received in formalin labeled "ascending colon" are 3 tan-pink tissue fragments measuring 2 mm in aggregate.

F. Received in formalin labeled "terminal ileum" are 3 tan-pink tissue fragments measuring 7 mm in aggregate.

All specimens are entirely submitted in 4 cassette(s).

MICROSCOPIC DESCRIPTION:

A. Rectal 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. Reactive epithelial changes are seen adjacent to areas of active inflammation.

B. Sigmoid colonic mucosa shows mild to moderate 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. Lamina propria shows increased plasma cells and lymphocytes.

C. Descending colonic mucosa shows moderate to severe active chronic inflammation with crypt branching, crypt atrophy, and focal crypt abscesses. The inflammatory process is limited to the mucosa without evidence of granulomas. Basal plasmacytosis is prominent. Focally, the colonic epithelium shows nuclear enlargement, hyperchromasia, and architectural complexity suspicious for low-grade dysplasia. In addition to the chronic inflammatory changes, there are numerous neutrophils and pseudomembranes suspicious for superimposed *Clostridioides difficile* infection.

D. Transverse colonic mucosa shows mild 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. Basal plasmacytosis is prominent.

F. Terminal ileal mucosa shows mild non-specific inflammation without architectural distortion. 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
- Features suggestive of superimposed *Clostridioides difficile* infection

- severe 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 to severe active chronic colitis with crypt architectural distortion
- Focal low-grade dysplasia identified
- 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 presence of low-grade dysplasia warrants close clinical follow-up and surveillance colonoscopy according to established guidelines for IBD-associated dysplasia. The histologic features suggestive of superimposed *Clostridioides difficile* infection should be correlated with clinical presentation and stool testing.

SPECIAL STUDIES:

CD3 and CD20 immunostains show a normal distribution of T and B lymphocytes without evidence of lymphoma. p53 immunohistochemical stain shows focal overexpression in areas of dysplasia. 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.