

SURGICAL PATHOLOGY REPORT [SYNTHETIC]

ACCESSION #: UC-2025-46541

DATE OF PROCEDURE: 04/12/2025

DATE OF REPORT: 04/15/2025

REQUESTING PHYSICIAN: Dr. Alice Smith, Gastroenterology

PATHOLOGIST: Dr. Shelley Wood, Anatomic Pathology

CLINICAL HISTORY:

66 year old male with 3 month history of bloody diarrhea, abdominal pain, and urgency. Colonoscopy showed continuous erythema and friability 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 3 tan-pink tissue fragments measuring 6 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 2 tan-pink tissue fragments measuring 8 mm in aggregate.
- D. Received in formalin labeled "transverse colon" are 5 tan-pink tissue fragments measuring 7 mm in aggregate.
- E. Received in formalin labeled "ascending colon" are 3 tan-pink tissue fragments measuring 8 mm in aggregate.

F. Received in formalin labeled "terminal ileum" are 6 tan-pink tissue fragments measuring 5 mm in aggregate.

All specimens are entirely submitted in 6 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. 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.

B. Sigmoid colonic mucosa shows moderate to severe active chronic inflammation with crypt architectural distortion, lamina propria plasma cells, and basal plasmacytosis. The inflammatory process is limited to the mucosa without evidence of granulomas. Reactive epithelial changes are seen adjacent to areas of active inflammation.

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. Occasional apoptotic bodies are present in crypts. The inflammatory pattern shows overlapping features of both ulcerative colitis and Crohn's disease.

D. Transverse colonic mucosa shows mild active chronic inflammation with marked crypt architectural distortion, numerous crypt abscesses, and complete goblet cell depletion. Lamina propria shows increased plasma cells and lymphocytes.

E. Ascending colonic mucosa shows mild to moderate active chronic inflammation with diffuse crypt architectural distortion, crypt abscesses, and goblet cell depletion. Mucosal edema and congestion are present.

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:

- moderate to severe active chronic colitis with crypt architectural distortion and goblet cell depletion
- moderate to 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
- Features of chronicity consistent with inflammatory bowel disease, with overlapping features of both UC and CD
- 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.

SPECIAL STUDIES:

CD3 and CD20 immunostains show a normal distribution of T and B lymphocytes without evidence of lymphoma. 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.