

SURGICAL PATHOLOGY REPORT [SYNTHETIC]

ACCESSION #: UC-2025-97980

DATE OF PROCEDURE: 04/23/2025

DATE OF REPORT: 04/27/2025

REQUESTING PHYSICIAN: Dr. Melinda Dennis, Gastroenterology

PATHOLOGIST: Dr. Miranda Valenzuela, Anatomic Pathology

CLINICAL HISTORY:

35 year old male with 1 month history of bloody diarrhea, abdominal pain, and urgency. Colonoscopy showed mild erythema and granularity limited to rectum and sigmoid 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 6 tan-pink tissue fragments measuring 2 mm in aggregate.
- B. Received in formalin labeled "sigmoid colon" are 2 tan-pink tissue fragments measuring 8 mm in aggregate.
- C. Received in formalin labeled "descending colon" are 4 tan-pink tissue fragments measuring 7 mm in aggregate.
- D. Received in formalin labeled "transverse colon" are 2 tan-pink tissue fragments measuring 6 mm in aggregate.
- E. Received in formalin labeled "ascending colon" are 6 tan-pink tissue fragments measuring 2 mm in aggregate.

F. Received in formalin labeled "terminal ileum" are 2 tan-pink tissue fragments measuring 4 mm in aggregate.

All specimens are entirely submitted in 2 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. Reactive epithelial changes are seen adjacent to areas of active inflammation.

B. Sigmoid colonic mucosa shows severe active chronic inflammation with diffuse neutrophilic cryptitis, crypt abscesses, and epithelial injury. The inflammatory process is limited to the mucosa without evidence of granulomas. Lamina propria shows increased plasma cells and lymphocytes. Areas of crypt dropout and lamina propria fibrosis are present, suggesting chronicity and possible treatment effect.

C. Descending 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 Paneth cell metaplasia is noted.

D. Transverse colonic mucosa shows mild to moderate active chronic inflammation with crypt architectural distortion and crypt abscesses. Lamina propria shows increased plasma cells and lymphocytes.

E. Ascending colonic mucosa shows mild to moderate active chronic inflammation with crypt architectural distortion and crypt abscesses. No evidence of dysplasia is identified. In addition to the chronic inflammatory changes, there are numerous neutrophils and pseudomembranes suspicious for superimposed *Clostridioides difficile* infection.

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:

- moderate to severe active chronic colitis with crypt architectural distortion and goblet cell depletion
- 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
- Changes consistent with chronicity and treatment effect
- severe 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 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. Histologic features suggesting chronicity and treatment effect are present. Correlation with treatment history is recommended.

SPECIAL STUDIES:

Grocott's methenamine silver (GMS) 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.