

SURGICAL PATHOLOGY REPORT [SYNTHETIC]

ACCESSION #: UC-2025-99053

DATE OF PROCEDURE: 05/04/2025

DATE OF REPORT: 05/08/2025

REQUESTING PHYSICIAN: Dr. Joshua Molina, Gastroenterology

PATHOLOGIST: Dr. Adam Tate, Anatomic Pathology

CLINICAL HISTORY:

69 year old male with 2 week history of bloody diarrhea, abdominal pain, and urgency. Colonoscopy showed moderate erythema and loss of vascular pattern 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 6 tan-pink tissue fragments measuring 3 mm in aggregate.
- B. Received in formalin labeled "sigmoid colon" are 4 tan-pink tissue fragments measuring 7 mm in aggregate.
- C. Received in formalin labeled "descending colon" are 2 tan-pink tissue fragments measuring 2 mm in aggregate.
- D. Received in formalin labeled "transverse colon" are 6 tan-pink tissue fragments measuring 3 mm in aggregate.
- E. Received in formalin labeled "ascending colon" are 5 tan-pink tissue fragments measuring 6 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 2 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 crypt architectural distortion, lamina propria plasma cells, and basal plasmacytosis. The inflammatory process is limited to the mucosa without evidence of granulomas. Marked decrease in goblet cell population. In addition to the chronic inflammatory changes, there are numerous neutrophils and pseudomembranes suspicious for superimposed *Clostridioides difficile* infection.

C. Descending colonic mucosa shows mild to 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. No evidence of dysplasia is identified.

D. Transverse colonic mucosa shows mild to moderate active chronic inflammation with marked crypt architectural distortion, numerous crypt abscesses, and complete goblet cell depletion. Occasional Paneth cell metaplasia is noted.

E. Ascending colonic mucosa shows mild active chronic inflammation with crypt architectural distortion and crypt abscesses. Basal plasmacytosis is prominent.

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. Rare cells with intranuclear and cytoplasmic inclusions suspicious for cytomegalovirus (CMV) infection are identified.

DIAGNOSIS:

A. Rectum, biopsy:

- severe active chronic colitis with crypt architectural distortion and goblet cell depletion
- Viral cytopathic changes suspicious for cytomegalovirus (CMV) 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:

- mild to moderate active chronic colitis with crypt architectural distortion
- Features suggestive of superimposed *Clostridioides difficile* infection
- 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 pattern of inflammation is consistent with ulcerative colitis as evidenced by the continuous mucosal involvement with greatest intensity distally. Immunohistochemical staining for CMV is positive, confirming the presence of CMV infection. This may contribute to the severity of colitis and should be considered in treatment planning. The histologic features suggestive of superimposed *Clostridioides difficile* infection should be correlated with clinical presentation and stool testing.

SPECIAL STUDIES:

Grocott's methenamine silver (GMS) stain is negative for fungal organisms. Cytomegalovirus (CMV) immunohistochemistry reveals scattered positive cells confirming viral infection. 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.