

SURGICAL PATHOLOGY REPORT [SYNTHETIC]

ACCESSION #: UC-2025-43124

DATE OF PROCEDURE: 04/19/2025

DATE OF REPORT: 04/23/2025

REQUESTING PHYSICIAN: Dr. Anthony Fernandez DDS, Gastroenterology

PATHOLOGIST: Dr. Adam Ramos, Anatomic Pathology

CLINICAL HISTORY:

40 year old female with longstanding 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 3 mm in aggregate.
- B. Received in formalin labeled "sigmoid colon" are 6 tan-pink tissue fragments measuring 8 mm in aggregate.
- C. Received in formalin labeled "descending colon" are 3 tan-pink tissue fragments measuring 4 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 6 tan-pink tissue fragments measuring 3 mm in aggregate.

F. Received in formalin labeled "terminal ileum" are 2 tan-pink tissue fragments measuring 7 mm in aggregate.

All specimens are entirely submitted in 1 cassette(s).

MICROSCOPIC DESCRIPTION:

A. Rectal mucosa shows 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. Lamina propria shows increased plasma cells and lymphocytes.

B. Sigmoid colonic mucosa shows 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.

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. Marked decrease in goblet cell population.

D. Transverse colonic mucosa shows mild active chronic inflammation with crypt architectural distortion and crypt abscesses. Surface epithelium shows reactive changes.

E. Ascending colonic mucosa shows mild to moderate active chronic inflammation with diffuse crypt architectural distortion, crypt abscesses, and goblet cell depletion. Reactive epithelial changes are seen adjacent to areas of active inflammation. Rare cells with intranuclear and cytoplasmic inclusions suspicious for cytomegalovirus (CMV) infection are 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 mild reactive changes. 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 active chronic colitis with crypt architectural distortion and goblet cell depletion
- Viral cytopathic changes suspicious for cytomegalovirus (CMV) infection
- 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
- 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 presence of diffuse crypt architectural distortion, basal plasmacytosis, and continuous inflammatory pattern strongly supports the diagnosis of ulcerative colitis. 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:

Cytomegalovirus (CMV) immunohistochemistry is negative for viral inclusions. 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.