

SURGICAL PATHOLOGY REPORT [SYNTHETIC]

ACCESSION #: UC-2025-29348

DATE OF PROCEDURE: 04/12/2025

DATE OF REPORT: 04/16/2025

REQUESTING PHYSICIAN: Dr. Jordan Ward, Gastroenterology

PATHOLOGIST: Dr. Joshua Patterson, Anatomic Pathology

CLINICAL HISTORY:

66 year old male with 3 month 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 2 tan-pink tissue fragments measuring 5 mm in aggregate.
- B. Received in formalin labeled "sigmoid colon" are 2 tan-pink tissue fragments measuring 2 mm in aggregate.
- C. Received in formalin labeled "descending colon" are 5 tan-pink tissue fragments measuring 2 mm in aggregate.
- D. Received in formalin labeled "transverse colon" are 3 tan-pink tissue fragments measuring 6 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 6 tan-pink tissue fragments measuring 4 mm in aggregate.

All specimens are entirely submitted in 5 cassette(s).

MICROSCOPIC DESCRIPTION:

A. Rectal mucosa shows fulminant active chronic inflammation with severe cryptitis, crypt architectural distortion, and mucosal ulceration. The inflammatory process is limited to the mucosa without evidence of granulomas. Marked decrease in goblet cell population.

B. Sigmoid 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 Paneth cell metaplasia is noted. Terminal ileal mucosa shows mild active inflammation with neutrophilic cryptitis, likely representing backwash ileitis.

C. Descending colonic mucosa shows mild to moderate active chronic inflammation with diffuse crypt architectural distortion, crypt abscesses, and goblet cell depletion. The inflammatory process is limited to the mucosa without evidence of granulomas. Basal plasmacytosis is prominent.

D. Transverse colonic mucosa shows mild active chronic inflammation with diffuse crypt architectural distortion, crypt abscesses, and goblet cell depletion. Occasional Paneth cell metaplasia is noted. In addition to the chronic inflammatory changes, there are numerous neutrophils and pseudomembranes suspicious for superimposed *Clostridioides difficile* infection.

E. Ascending colonic mucosa shows mild to moderate active chronic inflammation with diffuse crypt architectural distortion, crypt abscesses, and goblet cell depletion. Lamina propria shows increased plasma cells and lymphocytes.

F. Terminal ileal mucosa shows no significant pathologic abnormality. No evidence of chronic inflammatory bowel disease identified in this section. Areas of crypt dropout and lamina propria fibrosis are present, suggesting chronicity and possible treatment effect.

DIAGNOSIS:

A. Rectum, biopsy:

- fulminant active chronic colitis with crypt architectural distortion and goblet cell depletion
- Changes consistent with chronicity and treatment effect

- Mild active ileitis, consistent with backwash ileitis in the setting of ulcerative colitis
- fulminant 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:

- 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 presence of diffuse crypt architectural distortion, basal plasmacytosis, and continuous inflammatory pattern strongly supports the diagnosis of ulcerative colitis. The histologic features suggestive of superimposed *Clostridioides difficile* infection should be correlated with clinical presentation and stool testing. The mild ileal inflammation in the context of pancolitis is consistent with backwash ileitis, which can be seen in ulcerative colitis and does not necessarily indicate Crohn's disease. Histologic features suggesting chronicity and treatment effect are present. Correlation with treatment history is recommended.

SPECIAL STUDIES:

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