

SURGICAL PATHOLOGY REPORT [SYNTHETIC]

ACCESSION #: UC-2025-60334

DATE OF PROCEDURE: 05/06/2025

DATE OF REPORT: 05/08/2025

REQUESTING PHYSICIAN: Dr. Devin Johnson, Gastroenterology

PATHOLOGIST: Dr. Robert Harrell, Anatomic Pathology

CLINICAL HISTORY:

22 year old female with 3 week history of bloody diarrhea, abdominal pain, and urgency. Colonoscopy showed diffuse erythema, loss of vascular pattern, and contact bleeding from rectum to hepatic 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 4 tan-pink tissue fragments measuring 2 mm in aggregate.
- B. Received in formalin labeled "sigmoid colon" are 3 tan-pink tissue fragments measuring 6 mm in aggregate.
- C. Received in formalin labeled "descending colon" are 4 tan-pink tissue fragments measuring 5 mm in aggregate.
- D. Received in formalin labeled "transverse colon" are 4 tan-pink tissue fragments measuring 4 mm in aggregate.
- E. Received in formalin labeled "ascending colon" are 5 tan-pink tissue fragments measuring 7 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 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. Basal plasmacytosis is prominent. Rare cells with intranuclear and cytoplasmic inclusions suspicious for cytomegalovirus (CMV) infection are identified.

B. Sigmoid colonic mucosa shows mild to moderate 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.

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. Marked decrease in goblet cell population. Terminal ileal mucosa shows mild active inflammation with neutrophilic cryptitis, likely representing backwash ileitis. Areas of crypt dropout and lamina propria fibrosis are present, suggesting chronicity and possible treatment effect.

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

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

F. Terminal ileal mucosa shows essentially normal ileal mucosa with intact villous architecture and no active inflammation. 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
- Mild active ileitis, consistent with backwash ileitis in the setting of ulcerative colitis

- 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
- Changes consistent with chronicity and treatment effect
- Viral cytopathic changes suspicious for cytomegalovirus (CMV) infection
- 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 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 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:

CD3 and CD20 immunostains show a normal distribution of T and B lymphocytes without evidence of lymphoma. Cytomegalovirus (CMV) immunohistochemistry reveals scattered positive cells confirming viral infection.

This is a synthetic educational pathology report created for AI training purposes. It does not represent a real patient case.