

SURGICAL PATHOLOGY REPORT [SYNTHETIC]

ACCESSION #: UC-2025-36785

DATE OF PROCEDURE: 05/07/2025

DATE OF REPORT: 05/09/2025

REQUESTING PHYSICIAN: Dr. Ryan Freeman, Gastroenterology

PATHOLOGIST: Dr. Nicole Hunter, Anatomic Pathology

CLINICAL HISTORY:

68 year old female with 3 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 5 tan-pink tissue fragments measuring 7 mm in aggregate.
- B. Received in formalin labeled "sigmoid colon" are 4 tan-pink tissue fragments measuring 6 mm in aggregate.
- C. Received in formalin labeled "descending colon" are 6 tan-pink tissue fragments measuring 5 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 4 mm in aggregate.

F. Received in formalin labeled "terminal ileum" are 6 tan-pink tissue fragments measuring 5 mm in aggregate.

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

MICROSCOPIC DESCRIPTION:

A. Rectal mucosa shows moderate to severe 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. Occasional Paneth cell metaplasia is noted. Rare cells with intranuclear and cytoplasmic inclusions suspicious for cytomegalovirus (CMV) infection are identified.

B. Sigmoid colonic mucosa shows moderate to 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. Mucosal edema and congestion are present.

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. Occasional apoptotic bodies are present in crypts.

D. Transverse colonic mucosa shows mild active chronic inflammation with diffuse crypt architectural distortion, crypt abscesses, and goblet cell depletion. Basal plasmacytosis is prominent.

E. Ascending colonic mucosa shows mild to moderate active chronic inflammation with crypt architectural distortion and crypt abscesses. Reactive epithelial changes are seen adjacent to areas of active inflammation.

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.

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:

- 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:

- moderate to severe active chronic colitis with crypt architectural distortion
- Viral cytopathic changes suspicious for cytomegalovirus (CMV) 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. 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.

SPECIAL STUDIES:

Acid-fast bacilli (AFB) stain is negative for mycobacterial organisms. 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.