

SURGICAL PATHOLOGY REPORT [SYNTHETIC]

ACCESSION #: UC-2025-29975

DATE OF PROCEDURE: 04/14/2025

DATE OF REPORT: 04/18/2025

REQUESTING PHYSICIAN: Dr. Anne Cook, Gastroenterology

PATHOLOGIST: Dr. Frank Davis, Anatomic Pathology

CLINICAL HISTORY:

20 year old female with 2 month history of bloody diarrhea, abdominal pain, and urgency. Colonoscopy showed severe friability, superficial ulcerations, and pseudopolyps throughout the 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 3 tan-pink tissue fragments measuring 5 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 8 mm in aggregate.
- D. Received in formalin labeled "transverse colon" are 5 tan-pink tissue fragments measuring 5 mm in aggregate.
- E. Received in formalin labeled "ascending colon" are 3 tan-pink tissue fragments measuring 6 mm in aggregate.

F. Received in formalin labeled "terminal ileum" are 2 tan-pink tissue fragments measuring 8 mm in aggregate.

All specimens are entirely submitted in 6 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. Reactive epithelial changes are seen adjacent to areas of active inflammation. Terminal ileal mucosa shows mild active inflammation with neutrophilic cryptitis, likely representing backwash ileitis.

B. Sigmoid colonic mucosa shows moderate to severe active chronic inflammation with marked crypt architectural distortion, numerous crypt abscesses, and complete goblet cell depletion. The inflammatory process is limited to the mucosa without evidence of granulomas. Lamina propria shows increased plasma cells and lymphocytes.

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 moderate active chronic inflammation with marked crypt architectural distortion, numerous crypt abscesses, and complete goblet cell depletion. Marked decrease in goblet cell population. Rare cells with intranuclear and cytoplasmic inclusions suspicious for cytomegalovirus (CMV) infection are identified.

E. Ascending colonic mucosa shows mild active chronic inflammation with crypt architectural distortion and crypt abscesses. Marked decrease in goblet cell population.

F. Terminal ileal mucosa shows no significant pathologic abnormality. 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
- Viral cytopathic changes suspicious for cytomegalovirus (CMV) infection

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

SPECIAL STUDIES:

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