

SURGICAL PATHOLOGY REPORT [SYNTHETIC]

ACCESSION #: UC-2025-63069

DATE OF PROCEDURE: 05/05/2025

DATE OF REPORT: 05/09/2025

REQUESTING PHYSICIAN: Dr. Matthew Hunter, Gastroenterology

PATHOLOGIST: Dr. Alicia Matthews, Anatomic Pathology

CLINICAL HISTORY:

45 year old female with 10 year 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 5 tan-pink tissue fragments measuring 8 mm in aggregate.
- B. Received in formalin labeled "sigmoid colon" are 5 tan-pink tissue fragments measuring 8 mm in aggregate.
- C. Received in formalin labeled "descending colon" are 6 tan-pink tissue fragments measuring 4 mm in aggregate.
- D. Received in formalin labeled "transverse colon" are 4 tan-pink tissue fragments measuring 2 mm in aggregate.
- E. Received in formalin labeled "ascending colon" are 4 tan-pink tissue fragments measuring 5 mm in aggregate.

F. Received in formalin labeled "terminal ileum" are 2 tan-pink tissue fragments measuring 6 mm in aggregate.

All specimens are entirely submitted in 4 cassette(s).

MICROSCOPIC DESCRIPTION:

A. Rectal mucosa shows fulminant 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. Surface epithelium shows reactive changes. The inflammatory pattern shows overlapping features of both ulcerative colitis and Crohn's disease.

B. Sigmoid colonic 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. Surface epithelium shows reactive changes. Rare cells with intranuclear and cytoplasmic inclusions suspicious for cytomegalovirus (CMV) infection are identified.

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. Surface epithelium shows reactive changes.

D. Transverse colonic mucosa shows moderate active chronic inflammation with crypt architectural distortion and crypt abscesses. Marked decrease in goblet cell population.

E. Ascending colonic mucosa shows mild active chronic inflammation with diffuse crypt architectural distortion, crypt abscesses, and goblet cell depletion. Lamina propria shows increased plasma cells and lymphocytes. Areas of crypt dropout and lamina propria fibrosis are present, suggesting chronicity and possible treatment effect.

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. Terminal ileal mucosa shows mild active inflammation with neutrophilic cryptitis, likely representing backwash ileitis.

DIAGNOSIS:

A. Rectum, biopsy:

- fulminant active chronic colitis with crypt architectural distortion and goblet cell depletion
- 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:

- severe active chronic colitis with crypt architectural distortion and goblet cell depletion
- Viral cytopathic changes suspicious for cytomegalovirus (CMV) infection
- 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 consistent with ulcerative colitis
- No dysplasia identified

F. Terminal ileum, biopsy:

- Mild non-specific inflammation
- Changes consistent with chronicity and treatment effect
- Features of chronicity consistent with inflammatory bowel disease, with overlapping features of both UC and CD
- 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 overall histologic features are characteristic of ulcerative colitis in the active phase. 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 findings show overlapping features of both ulcerative colitis and Crohn's disease. This pattern may represent an 'indeterminate colitis' and correlation with clinical, endoscopic, and serologic markers is strongly recommended for further classification. 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:

Immunohistochemical stain for p53 shows no evidence of dysplasia-associated molecular alterations. 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.