

SURGICAL PATHOLOGY REPORT [SYNTHETIC]

ACCESSION #: UC-2025-16239

DATE OF PROCEDURE: 04/20/2025

DATE OF REPORT: 04/22/2025

REQUESTING PHYSICIAN: Dr. Jennifer Johnson, Gastroenterology

PATHOLOGIST: Dr. Danielle Morse, Anatomic Pathology

CLINICAL HISTORY:

59 year old male 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 3 tan-pink tissue fragments measuring 7 mm in aggregate.
- B. Received in formalin labeled "sigmoid colon" are 4 tan-pink tissue fragments measuring 3 mm in aggregate.
- C. Received in formalin labeled "descending colon" are 2 tan-pink tissue fragments measuring 5 mm in aggregate.
- D. Received in formalin labeled "transverse colon" are 5 tan-pink tissue fragments measuring 6 mm in aggregate.
- E. Received in formalin labeled "ascending colon" are 4 tan-pink tissue fragments measuring 7 mm in aggregate.

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

All specimens are entirely submitted in 6 cassette(s).

MICROSCOPIC DESCRIPTION:

A. Rectal mucosa shows 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. Basal plasmacytosis is prominent.

B. Sigmoid colonic mucosa shows 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. Occasional apoptotic bodies are present in crypts.

C. Descending colonic mucosa shows 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. Marked decrease in goblet cell population. Rare cells with intranuclear and cytoplasmic inclusions suspicious for cytomegalovirus (CMV) infection are identified. Terminal ileal mucosa shows mild active inflammation with neutrophilic cryptitis, likely representing backwash ileitis.

D. Transverse colonic mucosa shows mild to moderate active chronic inflammation with marked crypt architectural distortion, numerous crypt abscesses, and complete goblet cell depletion. Reactive epithelial changes are seen adjacent to areas of active inflammation. The inflammatory pattern shows overlapping features of both ulcerative colitis and Crohn's disease.

E. Ascending colonic mucosa shows mild to moderate active chronic inflammation with diffuse crypt architectural distortion, crypt abscesses, and goblet cell depletion. Occasional Paneth cell metaplasia is noted.

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 active chronic colitis with crypt architectural distortion and goblet cell depletion

- Features of chronicity consistent with inflammatory bowel disease, with overlapping features of both UC and CD
- moderate consistent with ulcerative colitis
- No dysplasia identified
- No evidence of cytomegalovirus (CMV) infection

B. Sigmoid colon, biopsy:

- moderate 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 consistent with ulcerative colitis
- No dysplasia identified

C-E. Descending, transverse, and ascending colon, biopsies:

- moderate 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 pattern of inflammation is consistent with ulcerative colitis as evidenced by the continuous mucosal involvement with greatest intensity distally. 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.

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.