SURGICAL PATHOLOGY REPORT [SYNTHETIC]

ACCESSION #: UC-2025-37609
DATE OF PROCEDURE: 04/29/2025
DATE OF REPORT: 05/01/2025
REQUESTING PHYSICIAN: Dr. William Todd, Gastroenterology
PATHOLOGIST: Dr. James Hicks, Anatomic Pathology

CLINICAL HISTORY:

33 year old female with 2 week history of bloody diarrhea, abdominal pain, and urgency. Colonoscopy showed severe ulceration and spontaneous bleeding 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 6 tan-pink tissue fragments measuring 6 mm in aggregate.

B. Received in formalin labeled "sigmoid colon" are 5 tan-pink tissue fragments measuring 7 mm in aggregate.

C. Received in formalin labeled "descending colon" are 5 tan-pink tissue fragments measuring 2 mm in aggregate.

D. Received in formalin labeled "transverse colon" are 3 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 6 tan-pink tissue fragments measuring 5 mm in aggregate.

All specimens are entirely submitted in 2 cassette(s).

MICROSCOPIC DESCRIPTION:

A. Rectal 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. Basal plasmacytosis is prominent.

B. Sigmoid colonic 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. No evidence of dysplasia is identified. 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.

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. Mucosal edema and congestion are present. In addition to the chronic inflammatory changes, there are numerous neutrophils and pseudomembranes suspicious for superimposed Clostridioides difficile infection.

D. Transverse colonic mucosa shows mild active chronic inflammation with crypt architectural distortion and crypt abscesses. Occasional Paneth cell metaplasia is noted.

E. Ascending colonic mucosa shows mild active chronic inflammation with diffuse crypt architectural distortion, crypt abscesses, and goblet cell depletion. Occasional apoptotic bodies are present in crypts.

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:

- 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

- Features suggestive of superimposed Clostridioides difficile infection
- moderate to severe 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
- 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
- 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. Clinical correlation and follow-up biopsies are recommended to monitor disease activity and treatment response. 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 features suggestive of superimposed Clostridioides difficile infection should be correlated with clinical presentation and stool testing. 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:

Acid-fast bacilli (AFB) stain is negative for mycobacterial organisms. Cytomegalovirus (CMV) immunohistochemistry reveals scattered positive cells confirming viral infection. Gram stain highlights numerous gram-positive bacilli morphologically consistent with Clostridioides difficile.

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