

SURGICAL PATHOLOGY REPORT [SYNTHETIC]

ACCESSION #: UC-2025-40360

DATE OF PROCEDURE: 04/25/2025

DATE OF REPORT: 04/28/2025

REQUESTING PHYSICIAN: Dr. Margaret Lane, Gastroenterology

PATHOLOGIST: Dr. Anne Kelly, Anatomic Pathology

CLINICAL HISTORY:

56 year old male with 3 month history of bloody diarrhea, abdominal pain, and urgency. Colonoscopy showed continuous erythema and friability from rectum to splenic 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 2 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 6 tan-pink tissue fragments measuring 3 mm in aggregate.
- D. Received in formalin labeled "transverse colon" are 3 tan-pink tissue fragments measuring 3 mm in aggregate.
- E. Received in formalin labeled "ascending colon" are 4 tan-pink tissue fragments measuring 4 mm in aggregate.

F. Received in formalin labeled "terminal ileum" are 2 tan-pink tissue fragments measuring 7 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 diffuse neutrophilic cryptitis, crypt abscesses, and epithelial injury. The inflammatory process is limited to the mucosa without evidence of granulomas. Reactive epithelial changes are seen adjacent to areas of active inflammation. In addition to the chronic inflammatory changes, there are numerous neutrophils and pseudomembranes suspicious for superimposed *Clostridioides difficile* infection.

B. Sigmoid colonic mucosa shows moderate 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. Occasional Paneth cell metaplasia is noted.

C. Descending 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. 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. Lamina propria shows increased plasma cells and lymphocytes.

E. Ascending colonic mucosa shows mild active chronic inflammation with crypt architectural distortion and crypt abscesses. Mucosal edema and congestion are present. Areas of crypt dropout and lamina propria fibrosis are present, suggesting chronicity and possible treatment effect.

F. Terminal ileal mucosa shows mild reactive lymphoid hyperplasia without evidence of chronic inflammatory bowel disease. 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 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:

- 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
- Changes consistent with chronicity and treatment effect
- Features suggestive of superimposed *Clostridioides difficile* infection
- 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. The histologic features suggestive of superimposed *Clostridioides difficile* infection should be correlated with clinical presentation and stool testing. Histologic features suggesting chronicity and treatment effect are present. Correlation with treatment history is recommended.

SPECIAL STUDIES:

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