SURGICAL PATHOLOGY REPORT [SYNTHETIC]

ACCESSION #: UC-2025-38550 DATE OF PROCEDURE: 05/02/2025 DATE OF REPORT: 05/06/2025

REQUESTING PHYSICIAN: Dr. Terri Kelly, Gastroenterology **PATHOLOGIST:** Dr. Cheryl Anderson, Anatomic Pathology

CLINICAL HISTORY:

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

F. Received in formalin labeled "terminal ileum" are 3 tan-pink tissue fragments measuring 3 mm in aggregate.

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

MICROSCOPIC DESCRIPTION:

- A. Rectal mucosa shows moderate to severe active chronic inflammation with marked epithelial injury, neutrophilic cryptitis, and basal lymphoplasmacytosis. The inflammatory process is limited to the mucosa without evidence of granulomas. Reactive epithelial changes are seen adjacent to areas of active inflammation.
- B. Sigmoid 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. Occasional apoptotic bodies are present in crypts. 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 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 mild active chronic inflammation with crypt branching, crypt atrophy, and focal crypt abscesses. Lamina propria shows increased plasma cells and lymphocytes.
- E. Ascending colonic mucosa shows mild to moderate active chronic inflammation with diffuse crypt architectural distortion, crypt abscesses, and goblet cell depletion. Surface epithelium shows reactive changes.
- F. Terminal ileal mucosa shows normal small intestinal mucosa with preserved villous architecture. No evidence of chronic inflammatory bowel disease identified in this section. Areas of crypt dropout and lamina propria fibrosis are present, suggesting chronicity and possible treatment effect.

DIAGNOSIS:

A. Rectum, biopsy:

 moderate to severe active chronic colitis with crypt architectural distortion and goblet cell depletion

- Changes consistent with chronicity and treatment effect
- 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
- moderate to 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
- 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 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. Histologic features suggesting chronicity and treatment effect are present. Correlation with treatment history is recommended.

SPECIAL STUDIES:

No special stains were performed. 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.