SURGICAL PATHOLOGY REPORT [SYNTHETIC]

ACCESSION #: UC-2025-22743 **DATE OF PROCEDURE**: 04/14/2025 **DATE OF REPORT**: 04/18/2025

REQUESTING PHYSICIAN: Dr. Evelyn Knight, Gastroenterology

PATHOLOGIST: Dr. Ashley Chen, Anatomic Pathology

CLINICAL HISTORY:

54 year old female with 1 year history of bloody diarrhea, abdominal pain, and urgency. Colonoscopy showed circumferential ulceration and pseudopolyps from rectum to mid-transverse 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 3 tan-pink tissue fragments measuring 5 mm in aggregate.
- B. Received in formalin labeled "sigmoid colon" are 2 tan-pink tissue fragments measuring 8 mm in aggregate.
- C. Received in formalin labeled "descending colon" are 4 tan-pink tissue fragments measuring 5 mm in aggregate.
- D. Received in formalin labeled "transverse colon" are 2 tan-pink tissue fragments measuring 4 mm in aggregate.
- E. Received in formalin labeled "ascending colon" are 6 tan-pink tissue fragments measuring 8 mm in aggregate.

F. Received in formalin labeled "terminal ileum" are 2 tan-pink tissue fragments measuring 4 mm in aggregate.

All specimens are entirely submitted in 1 cassette(s).

MICROSCOPIC DESCRIPTION:

- A. Rectal mucosa shows moderate to severe 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.
- 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. Rare cells with intranuclear and cytoplasmic inclusions suspicious for cytomegalovirus (CMV) infection are identified. Focally, the colonic epithelium shows nuclear enlargement, hyperchromasia, and architectural complexity suspicious for low-grade dysplasia.
- C. Descending colonic mucosa shows moderate active chronic inflammation with diffuse crypt architectural distortion, crypt abscesses, and goblet cell depletion. The inflammatory process is limited to the mucosa without evidence of granulomas. Reactive epithelial changes are seen adjacent to areas of active inflammation.
- D. Transverse colonic mucosa shows mild to 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. Reactive epithelial changes are seen adjacent to areas of active inflammation.
- 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

- 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
- Viral cytopathic changes suspicious for cytomegalovirus (CMV) infection
- moderate consistent with ulcerative colitis
- No dysplasia identified

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

- moderate active chronic colitis with crypt architectural distortion
- Focal low-grade dysplasia identified
- 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 presence of low-grade dysplasia warrants close clinical follow-up and surveillance colonoscopy according to established guidelines for IBD-associated dysplasia.

SPECIAL STUDIES:

Immunohistochemical stain for p53 shows no evidence of dysplasia-associated molecular alterations. Cytomegalovirus (CMV) immunohistochemistry reveals scattered positive cells confirming viral infection. p53 immunohistochemical stain shows focal overexpression in areas of dysplasia.

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