

# **SURGICAL PATHOLOGY REPORT [SYNTHETIC]**

**ACCESSION #:** UC-2025-46125

**DATE OF PROCEDURE:** 04/15/2025

**DATE OF REPORT:** 04/18/2025

**REQUESTING PHYSICIAN:** Dr. Kayla Weaver, Gastroenterology

**PATHOLOGIST:** Dr. Richard Dunn, Anatomic Pathology

## **CLINICAL HISTORY:**

39 year old male with 6 month history of bloody diarrhea, abdominal pain, and urgency. Colonoscopy showed pancolitis with diffuse ulceration and spontaneous bleeding. 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 8 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 6 tan-pink tissue fragments measuring 2 mm in aggregate.
- D. Received in formalin labeled "transverse colon" are 5 tan-pink tissue fragments measuring 5 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 7 mm in aggregate.

All specimens are entirely submitted in 3 cassette(s).

## **MICROSCOPIC DESCRIPTION:**

A. Rectal mucosa shows 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. Mucosal edema and congestion are present. Rare cells with intranuclear and cytoplasmic inclusions suspicious for cytomegalovirus (CMV) infection are identified.

B. Sigmoid colonic mucosa shows 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. Marked decrease in goblet cell population.

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. Terminal ileal mucosa shows mild active inflammation with neutrophilic cryptitis, likely representing backwash ileitis.

D. Transverse colonic mucosa shows moderate active chronic inflammation with diffuse crypt architectural distortion, crypt abscesses, and goblet cell depletion. Basal plasmacytosis is prominent.

E. Ascending colonic mucosa shows mild to moderate active chronic inflammation with crypt architectural distortion and crypt abscesses. Lamina propria shows increased plasma cells and lymphocytes.

F. Terminal ileal mucosa shows normal small intestinal mucosa with appropriate crypt to villous ratio. No evidence of chronic inflammatory bowel disease identified in this section.

## **DIAGNOSIS:**

### ***A. Rectum, biopsy:***

- severe active chronic colitis with crypt architectural distortion and goblet cell depletion
- Viral cytopathic changes suspicious for cytomegalovirus (CMV) infection
- severe consistent with ulcerative colitis

- No dysplasia identified
- No evidence of cytomegalovirus (CMV) infection

### ***B. Sigmoid colon, biopsy:***

- severe active chronic colitis with crypt architectural distortion and goblet cell depletion
- severe consistent with ulcerative colitis
- No dysplasia identified

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

- moderate active chronic colitis with crypt architectural distortion
- Mild active ileitis, consistent with backwash ileitis in the setting of ulcerative colitis
- 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 lack of granulomas, ileal involvement, and transmural inflammation favors ulcerative colitis over Crohn's disease. 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 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.\_