

# SURGICAL PATHOLOGY REPORT [SYNTHETIC]

**ACCESSION #:** UC-2025-73258

**DATE OF PROCEDURE:** 05/02/2025

**DATE OF REPORT:** 05/06/2025

**REQUESTING PHYSICIAN:** Dr. Jonathan Cooper, Gastroenterology

**PATHOLOGIST:** Dr. Barbara Smith, Anatomic Pathology

## CLINICAL HISTORY:

42 year old female with 1 year 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 8 mm in aggregate.
- B. Received in formalin labeled "sigmoid colon" are 4 tan-pink tissue fragments measuring 4 mm in aggregate.
- C. Received in formalin labeled "descending colon" are 2 tan-pink tissue fragments measuring 6 mm in aggregate.
- D. Received in formalin labeled "transverse colon" are 4 tan-pink tissue fragments measuring 8 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 2 tan-pink tissue fragments measuring 8 mm in aggregate.

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

## **MICROSCOPIC DESCRIPTION:**

A. Rectal mucosa shows moderate active chronic inflammation with marked epithelial injury, neutrophilic cryptitis, and basal lymphoplasmacytosis. The inflammatory process is limited to the mucosa without evidence of granulomas. Lamina propria shows increased plasma cells and lymphocytes. Areas of crypt dropout and lamina propria fibrosis are present, suggesting chronicity and possible treatment effect.

B. Sigmoid 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. Marked decrease in goblet cell population. Rare cells with intranuclear and cytoplasmic inclusions suspicious for cytomegalovirus (CMV) infection are identified.

C. Descending colonic mucosa shows moderate active chronic inflammation with diffuse neutrophilic cryptitis, crypt abscesses, and epithelial injury. The inflammatory process is limited to the mucosa without evidence of granulomas. Surface epithelium shows reactive changes.

D. Transverse colonic mucosa shows moderate active chronic inflammation with crypt architectural distortion and crypt abscesses. Occasional apoptotic bodies are present in crypts.

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 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
- No evidence of cytomegalovirus (CMV) infection

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

- mild to moderate active chronic colitis with crypt architectural distortion and goblet cell depletion
- Changes consistent with chronicity and treatment effect
- mild to moderate consistent with ulcerative colitis
- No dysplasia identified

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

- moderate active chronic colitis with crypt architectural distortion
- 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. Histologic features suggesting chronicity and treatment effect are present. Correlation with treatment history is recommended.

### **SPECIAL STUDIES:**

Immunohistochemical stain for p53 shows no evidence of dysplasia-associated molecular alterations. 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.\_