

# SURGICAL PATHOLOGY REPORT [SYNTHETIC]

**ACCESSION #:** UC-2025-98716

**DATE OF PROCEDURE:** 04/27/2025

**DATE OF REPORT:** 04/29/2025

**REQUESTING PHYSICIAN:** Dr. April Forbes, Gastroenterology

**PATHOLOGIST:** Dr. Mary Martinez, Anatomic Pathology

## CLINICAL HISTORY:

38 year old male with 3 week history of bloody diarrhea, abdominal pain, and urgency. Colonoscopy showed mild erythema and granularity limited to rectum and sigmoid 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 4 tan-pink tissue fragments measuring 8 mm in aggregate.
- C. Received in formalin labeled "descending colon" are 6 tan-pink tissue fragments measuring 6 mm in aggregate.
- D. Received in formalin labeled "transverse colon" are 6 tan-pink tissue fragments measuring 2 mm in aggregate.
- E. Received in formalin labeled "ascending colon" are 2 tan-pink tissue fragments measuring 6 mm in aggregate.

F. Received in formalin labeled "terminal ileum" are 6 tan-pink tissue fragments measuring 8 mm in aggregate.

All specimens are entirely submitted in 6 cassette(s).

## **MICROSCOPIC DESCRIPTION:**

A. Rectal mucosa shows fulminant active chronic inflammation with crypt branching, crypt atrophy, and focal crypt abscesses. The inflammatory process is limited to the mucosa without evidence of granulomas. Lamina propria shows increased plasma cells and lymphocytes. Rare cells with intranuclear and cytoplasmic inclusions suspicious for cytomegalovirus (CMV) infection are identified.

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. No evidence of dysplasia is identified.

C. Descending colonic mucosa shows mild to 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. Lamina propria shows increased plasma cells and lymphocytes. Focally, the colonic epithelium shows nuclear enlargement, hyperchromasia, and architectural complexity suspicious for low-grade dysplasia.

D. Transverse colonic mucosa shows mild active chronic inflammation with crypt branching, crypt atrophy, and focal crypt abscesses. Marked decrease in goblet cell population.

E. Ascending colonic mucosa shows mild active chronic inflammation with crypt architectural distortion and crypt abscesses. No evidence of dysplasia is identified. The inflammatory pattern shows overlapping features of both ulcerative colitis and Crohn's disease.

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:**

- fulminant active chronic colitis with crypt architectural distortion and goblet cell depletion
- Focal low-grade dysplasia identified
- fulminant 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
- mild to moderate 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
- Features of chronicity consistent with inflammatory bowel disease, with overlapping features of both UC and CD
- 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 presence of diffuse crypt architectural distortion, basal plasmacytosis, and continuous inflammatory pattern strongly supports the diagnosis of ulcerative colitis. 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. The histologic findings show overlapping features of both ulcerative colitis and Crohn's disease. This pattern may represent an 'indeterminate colitis' and correlation with clinical, endoscopic, and serologic markers is strongly recommended for further classification.

## **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.\_