

SURGICAL PATHOLOGY REPORT [SYNTHETIC]

ACCESSION #: UC-2025-11943

DATE OF PROCEDURE: 05/07/2025

DATE OF REPORT: 05/10/2025

REQUESTING PHYSICIAN: Dr. Sydney Jacobson, Gastroenterology

PATHOLOGIST: Dr. James Lewis, Anatomic Pathology

CLINICAL HISTORY:

38 year old male with longstanding 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 2 mm in aggregate.
- B. Received in formalin labeled "sigmoid colon" are 5 tan-pink tissue fragments measuring 5 mm in aggregate.
- C. Received in formalin labeled "descending colon" are 4 tan-pink tissue fragments measuring 2 mm in aggregate.
- D. Received in formalin labeled "transverse colon" are 4 tan-pink tissue fragments measuring 4 mm in aggregate.
- E. Received in formalin labeled "ascending colon" are 4 tan-pink tissue fragments measuring 2 mm in aggregate.

F. Received in formalin labeled "terminal ileum" are 3 tan-pink tissue fragments measuring 7 mm in aggregate.

All specimens are entirely submitted in 5 cassette(s).

MICROSCOPIC DESCRIPTION:

A. Rectal 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 Paneth cell metaplasia is noted.

B. Sigmoid colonic mucosa shows 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. 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.

C. Descending colonic 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. Lamina propria shows increased plasma cells and lymphocytes. The inflammatory pattern shows overlapping features of both ulcerative colitis and Crohn's disease.

D. Transverse colonic mucosa shows moderate active chronic inflammation with marked crypt architectural distortion, numerous crypt abscesses, and complete goblet cell depletion. No evidence of dysplasia is identified. Rare cells with intranuclear and cytoplasmic inclusions suspicious for cytomegalovirus (CMV) infection are identified.

E. Ascending colonic mucosa shows mild to moderate active chronic inflammation with crypt architectural distortion and crypt abscesses. 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

- Features of chronicity consistent with inflammatory bowel disease, with overlapping features of both UC and CD
- moderate to 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
- Changes consistent with chronicity and treatment effect
- severe consistent with ulcerative colitis
- No dysplasia identified

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

- moderate to severe 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
- Mild active ileitis, consistent with backwash ileitis in the setting of ulcerative colitis
- 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 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. 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. Histologic features suggesting chronicity and treatment effect are present. Correlation with treatment history is recommended.

SPECIAL STUDIES:

Periodic acid-Schiff (PAS) stain is negative for fungal organisms. 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.