A 35-year-old woman with a history significant only for appendectomy presented to the emergency department with right lower-quadrant abdominal pain over the past 2 weeks. She described the pain as crampy and waxing and waning in intensity. She also reported having constipation, with her last bowel movement 3 days prior. She denied nausea, vomiting, hematochezia, or diarrhea.

On admission, her vital signs were all within normal limits. Physical examination findings were significant only for abdominal tenderness to palpation in the right lower quadrant. There were no signs of peritonitis.

Initial laboratory test results were significant for an elevated C-reactive protein level of 10.3 mg/dL (reference range, 0.0-1.0 mg/dL) and an elevated erythrocyte sedimentation rate of 78 mm/h (reference range, 0-20 mm/h). Computed tomography scans of the abdomen and pelvis revealed colonic thickening.

She was evaluated by a gastroenterologist who performed a colonoscopy, revealing ulcerated mucosa in the ileocecal valve and cecum. The endoscope was not able to be advanced to the terminal ileum as a result of swelling and edema. Subsequent small bowel follow-through showed a string sign (Figure), approximately 7 cm above the terminal ileum with circumferential narrowing.

These findings, along with biopsy results, were consistent with severe Crohn disease. The string sign, which can be seen in bowel contrast images, may be seen in patients with strictures, commonly fibrostenotic disease, as well as in patients with inflammatory disorders such as Crohn disease.\(^1\) It can also be seen in cases of hypertrophic pyloric stenosis where contrast traverses a narrow, elongated pylorus, as well as in cases of gastrointestinal tuberculosis, colon cancer, or carcinoid tumor.\(^2\)

REFERENCES: