

Tuberculous Colitis: A Case Report

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Case description:

21-year old Bangladeshi man with no past medical history presented with abdominal pain for 10 days.

He described his abdominal pain as a periumbilical colicky in nature, started mild then progressed to severe 4 days prior to ED presentation. It worsened with food ingestion. He had lost around 6 kilograms over a month.

The pain was not associated with diarrhea, nausea or vomiting. He did not have dysuria, change in urine color, nor fever. He did not have history of black stool, fresh bleeding per rectum. He did not have sick contact, and he did not have skin rash or joint pain. His past medical history is significant for *Helicobacter pylori* (*H. pylori*) associated gastritis, which was treated successfully, 3 years ago.

Physical Exam and Findings:

On physical examination, his temperature was 38 degrees Celsius. He was tachycardic, with heart rate of 135 bpm. His blood pressure was 90/60. His abdominal examination showed severe lower abdominal tenderness. The rest of the physical examination was unremarkable. The patient was managed with fluid resuscitation and was admitted to the medical floor.

The laboratory investigations showed microcytic anemia; hemoglobin of 8.1g/dL, MCV 61.1 x10⁻¹⁵L. C - Reactive protein (CRP) and ESR were 141 mg/L and 68 mm/h, respectively. Pancreatic enzymes were normal. Anemia workup was suggestive of iron deficiency anemia along with severe vitamin D and B12 deficiency (1 ng/mL and 88 ng/mL, respectively). Stool for occult blood and *H. pylori* antigen were negative. Blood culture was negative.

He underwent Computed Topographic (CT) scan for the abdomen. It showed distal small bowel lobes wall thickening. There is multiple mesenteric lymph node enlargement.

He underwent upper endoscopy, which showed erosive gastritis. Colonoscopy showed severe ulceration, pseudo-polyps with surrounding erythematous mucosa at the distal terminal ileum. The caecum is distorted with multiple severe ulcerations and polypoid lesions [Figure 1]. Tissue culture and biopsies were taken.

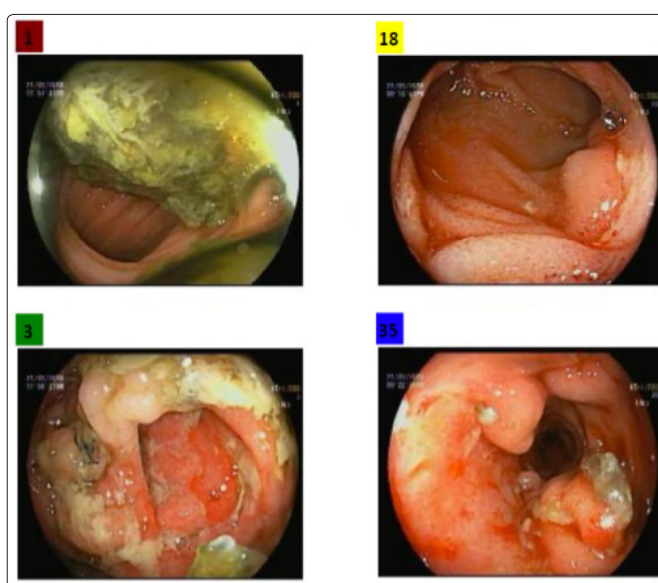


Figure 1: Pseudopolyps with surrounding erythematous mucosa at distal terminal ileum. Distorted cecum with multiple severe ulceration, and polypoid lesions, tissue culture and biopsies taken, otherwise normal colonoscopy. (1, 3 are from the cecum, 18 and 35 are from the ileum)

What is the Diagnosis?

Histopathological appearance in terminal ileum, cecum and left colon are those of acute inflammation with ulceration in terminal ileum and cecum. The preservation of crypt architecture and the lack of overt chronicity favor the possibility of infective colitis such as TB colitis.

Management:

The patient received treatment with Rifafour e-275 (3 tablets per day based on his weight) supplemented with 50 mg pyridoxine. He showed clinical improvement, gradually.

He received vitamin B12 and vitamin D supplements.

Discussion

Tuberculosis (TB) Colitis is considered one of the differential diagnoses for colonic pathologies, including Crohn's disease,

and ulcerative colitis. It has been considered as a rare chronic disease, mainly in endemic areas. Recently, it has been reported in immunocompromised patients, such as in AIDS patients [1]. The diagnosis of TB Colitis was initially a radiological diagnosis. Double-contrast barium enema used to be used for early diagnosis. However, colonoscopy and histopathological diagnosis have gained wide popularity.

The presence of caseating granuloma or positive acid-fast bacilli is diagnostic. However, both have low sensitivity and specificity of 32%, and 50%, respectively [2]. Therefore, the clinical diagnosis is made in the presence of intestinal lesion. In addition, therapeutic trial with anti-tuberculous medications is considered an acceptable approach in endemic areas.

Patients might present with different symptoms, ranging from aphthous ulceration, fever, weight loss, change in bowel habits, abdominal pain, GI bleeding, and ascites [3]. Ileocecal junction is the most common affected site. The treatment with quadruple antituberculosis therapy for 6 months is standard of care. It has been shown to be as effective as longer courses. Most of the patients improve, within 1 to 2 weeks [4-6].

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