Intestinal Tuberculosis vs Crohn’s Diseases – A Diagnostic Dilemma – A Case Report

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Abstract
Background: A 35/M admitted with complaints of abdomen distension and leg swelling for one week and dark colored stools for 4 days. Not a known case of DM/ SHT/ heart diseases. No history of TB in the past. Patient is a chronic alcoholic. He was severely pale, had bilateral pitting pedaledema, per abdomen examination showed fluid in the peritoneal cavity. Patient was not icteric.

Investigations: Investigations were done. Blood count revealed severe anemia (Hb4g/dL), hypoproteinemia (T. protein – 5.9, S. Albumin -2.9). Stool Occult Blood Test – positive. Coagulation profile – normal. CECT abdomen and pelvis taken – showed diffuse edematous wall thickening noted in Caecum, Ascending colon and right hepatic flexure. Multiple necrotic mesenteric and common iliac nodes noted. OGD scopy revealed corpus gastritis. Video colonoscopy showed inflamed edematous mucosa with ulceration in Caecum, Ascending colon and terminal Ileum with skip lesions. Biopsy taken. Biopsy sample turned out to be positive for MTB in CBNAAT test. HPE showed non-specific colitis.

Management: Patient was diagnosed with intestinal TB and started on category 1 ATT according to RNTCP guidelines. He was transfused 2 units PRBCs and given iron supplementation. Patient gradually improved, his pedal edema decreased. He was discharged after 30 days with ATT therapy and advised follow up.

Conclusion: Distinguishing intestinal TB and Crohn’s disease is a huge diagnostic challenge. Although a variety of endoscopic, radiological and histological criteria have been recommended for the differentiation, it often proves difficult in routine clinical practice. A guideline based approach in a patient with granulomatous colitis should be helpful in preventing unnecessary ATT in a patient with Crohn’s disease especially in a developed country. In developing countries where TB is endemic, starting ATT would be appropriate in times of diagnostic challenge.

Keywords: Anemia, Colonoscopy, Crohn’s disease, Granulomatous colitis.

Introduction
For the workup of a patient presenting with anemia, the routinely prescribed test are CBC, PS, stool occult blood, iron profile. For a patient, who presented with severe anemia, with no features of TB, further diagnostic work up revealed it to be due to iron deficiency anemia due to intestinal TB.

Case History
35/M with no co-morbidity presented with chief complaints of fatigability for 20 days, pedal edema, breathlessness and facial puffiness for 10 days. No chest pain or palpitation, no fever. Chronic alcoholic for past 10 years.
O/E: patient is thin built, pallor present, bilateral pedal edema present, facial puffiness present. P/A: soft, no tenderness, no free fluid. Lab investigations revealed Hb to be 4g/dl, total count as 4000, DC 92/1, platelet count 2.2lakh. urea 18, creatinine 1, total bilirubin 0.6, total protein 6.9. Iron profile indicated iron deficiency anemia (S.Fe- 28mcg/dl; S.Ferritin- 5mcg/L; TIBC- 586mcg/dl; Transferrin saturation 14%) FOBT positive 1/2 times. USG abdomen revealed grade 1 fatty liver with no free fluid. Echo normal study, UGI scopy normal. CT abdomen showed diffuse edematous wall thickening noted in caecum, ascending colon and right hepatic flexure with necrotic mesenteric and common iliac nodes. F/S/O GRANULOMATOUS ETIOLOGY. Video colonoscopy showed skip lesions with ulceronodular lesions with terminal stricture in ileum. HPE report showed non specific colitis. CBNAAT detected rifampicin sensitive MTB. Patient started on Cat1 ATT. 2 units of PRBC transfused.
Discussion
Tuberculosis is a major killer disease affecting mainly people of developing countries. Our case presented to us with SEVERE ANEMIA and in the end diagnosed to have INTESTINAL TB. Hematological abnormalities are common in TB patients, Anemia in 50-60% patients[1]. TB associated anemia completely resolved with ATT in 64.5% patients. For anemia of inflammation, ATT has significant role. For IDA and IDA with anemia of inflammation, iron based interventions are needed. Both high and low iron status is associated with poor prognosis for TB. In patients with TB lymphadenitis/ Abdominal TB, anemia occurs because of intravascular hemolysis[2].

Anemia of TB may be due to:

a) Nutritional deficiency
b) Malabsorption syndrome
c) Marrow suppression
d) Failure of iron utilization

It is reasonable to suspect and rule out TB as a possible association in patients with autoimmune hemolytic anemia, in patients in areas of high endemicity of TB. If no response to ATT alone, start steroids[3].

Conclusion
In a patient with intestinal tuberculosis with anemia, we infer the following:
1. ATT for anemia of inflammation.
2. Iron therapy for IDA/IDA with anemia of inflammation.
3. High iron and low iron have poor outcomes.

References
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