A Masquerade Ball at the Descending Colon

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INTRODUCTION

- Abdominal tuberculosis (TB) accounts for up to 5% of TB cases worldwide and the proximal colon is the most affected site.
- It can involve any part of the GI tract, however, TB in the descending colon is rarely reported.
- Most cases present with non-specific symptoms and without concomitant pulmonary TB making the diagnosis overlooked and delayed.

CASE PRESENTATION

- An 80-year-old man was found with new-onset microcytic anemia on routine labs. His PCP ordered a FIT test which came back positive. The patient felt well and denied gastrointestinal bleeding or other suspicious signs or symptoms.
- Diagnostic colonoscopy was performed which revealed a tumorous lesion in the descending colon occupying over 50% of the lumen. Endoscopic impression was concerning for malignancy and multiple biopsies were obtained.
- Histology revealed an acute focal colitis with an aphthous ulcer and few non-necrotizing granulomas.
- Given incongruity in histologic findings, a sigmoidoscopy was performed, and biopsy again revealed granulomatous inflammation as well as two small acid-fast positive structures. The patient underwent QuantiFERON testing which was positive.
- He reported a childhood exposure to mycobacterium tuberculosis but did not recall receiving treatment. Ancillary imaging did not reveal additional organ involvement.
- A definite diagnosis of M. tuberculosis could not be ascertained as samples were not cultured. Thus, another colonoscopy was performed with emphasis on tuberculosis microscopy and culture.
- Empiric treatment with RIPE and Azithromycin was started to cover tuberculosis and non-tuberculosis mycobacterium. M. tuberculosis was diagnosed by DNA probe and azithromycin was discontinued.

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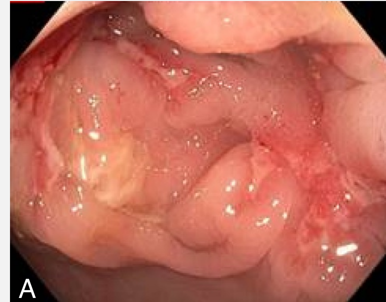
IMAGES



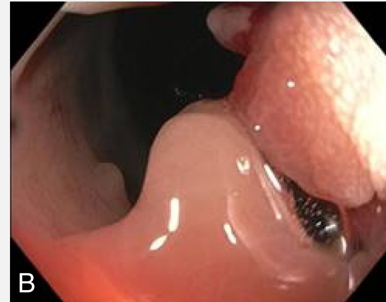


Figure A&B : Ulcero-hypertrophic form of colonic tuberculosis - mass like lesion on distal descending colon with ulceration on surface.

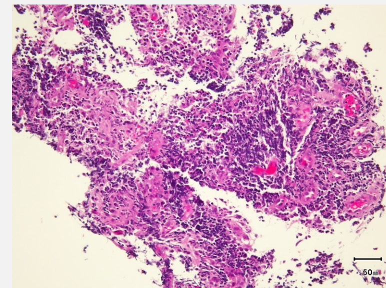
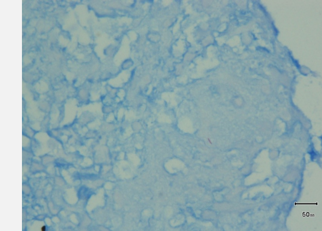


Figure C: hematoxylin and eosin (H&E) stain demonstrating active colitis with an ill-defined defined granulomatous area.

IMAGES

Figure D: AFB stain demonstrating granulomatous inflammation and acid-fast structures.



DISCUSSION

- In our case, the initial differential diagnosis included colorectal carcinoma, Crohn's disease and abdominal tuberculosis given the patients clinical picture, endoscopic findings and histology. Despite the colonoscopy suggesting a malignant etiology, incongruity with histologic findings prompted for repeat scoping which led to the findings of acid-fast positive structures and subsequently to the correct diagnosis.
- Abdominal TB possesses a diagnostic challenge due to its non-specific clinical presentation. When intestinal involvement is present, abdominal pain, weight loss, and changes in bowel habits are the most common manifestations.
- Endoscopically, it can mimic Crohn's Disease given its ulcerative nature as well as malignancy due to a hyperplastic reaction occasioning an inflammatory mass in the lumen.
- Abdominal TB is generally responsive to standard anti-tuberculous drugs and has shown significant resolution of symptoms in cases of tuberculous strictures.
- High clinical suspicion is necessary to ensure early diagnosis and treatment leading to favorable outcomes.

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