

Left Sided Colonic Tb Mimicking Carcinoma Colon: Rare Manifestation of A Common Disease

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Abstract:

Background: Involvement of the left colon by tuberculosis is a relatively uncommon presentation and the clinical presentations are very similar to carcinoma. Bleeding per rectum and constipation are the usual presenting features. Colonoscopy may reveal a mass lesion but only histopathological examination will be able to differentiate tuberculosis from malignancy.

Case Report: A 46 year old female patient presented with complaints of abdominal distension and bleeding per rectum on and off. Colonoscopic biopsy and histopathological examination of the mass lesion from the descending colon revealed mucosal ulceration and presence of submucosal granuloma and Langhans' giant cell suggesting tuberculosis. Segmental colonic resection with primary anastomosis was done uneventfully.

Conclusion: Left sided colon also may be affected with tuberculosis and should be kept as a differential diagnosis of patients presenting with bleeding per rectum.

Keywords: Tuberculosis; left sided colon; segmental colonic resection.

I. Introduction

Tuberculosis is a significant health problem of developing countries. There has also been a resurgence of tuberculosis in developed countries due to migration of people from developing countries, worsening social conditions, shortcomings of the public health services and Immunocompromised status due to diseases and medications individuals.¹ India alone contributes 1.98 million cases to the worldwide disease burden of 9.4 million cases and 500,000 people succumb to this illness in India annually.^{2,3} Given the prevalence of the disease in the Indian subcontinent, it is common to find this disease causing manifestations that are considered rare in context of the western countries. We present a case of left sided colonic tuberculosis presenting with symptoms of colonic carcinoma, which is a rare presentation of the disease.

II. Case report

A 46 years old lady presented to us with complaints of abdominal distension and bleeding per rectum on and off for 8 weeks. The patient had no history of hard stool or treatment of haemorrhoids or fissure in ano or any menstrual problems. She also had generalised weakness for approximately the same duration. Careful questioning revealed that the patient had increasing constipation over the past 4 weeks for which she used to take lactitol based laxatives. The general examination was insignificant except for the pallor. Systemic examination was within normal limits. Rectal examination did not reveal Blummer's shelf or haemorrhoids, fissure or fistula etc. The patient was planned for a colonoscopy based on the clinical evaluation which revealed a narrowing of the descending colon approximately 30 cms from the anal verge. The biopsy from the growth revealed mucosal ulceration with presence of submucosal granuloma and Langhans' giant cell (Figure 1).

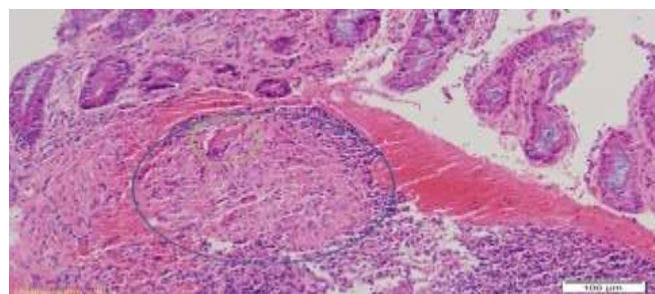


Figure 1 showing mucosal ulceration with presence of submucosal granuloma (blue circle) with langhans giant cell (green circle).

The features thus were suggestive of tubercular aetiology. Chest X-ray of the patient was normal. The patient was then started on antitubercular therapy and followed up. After completion of the antitubercular therapy the patient was reviewed but she continued having the symptoms of altered bowel habits and bleeding per rectum. Hence a CECT of the whole abdomen was done which revealed narrowing of the descending colon due to stricture (Figure 2).

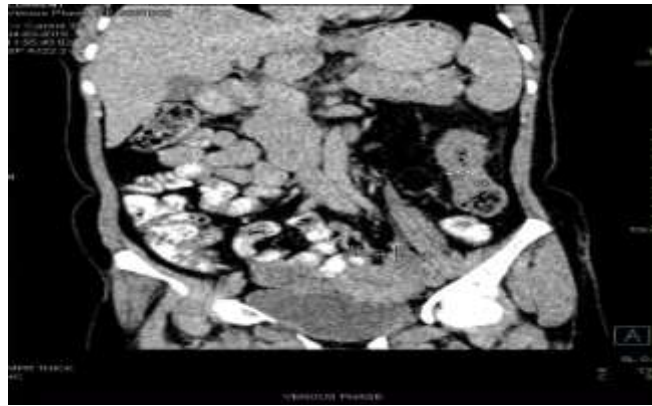


Figure 2 showing thickened descending colon.

The patient was taken up for surgery and segmental colonic resection with primary anastomosis was done. The patient recovered uneventfully. The resected specimen showed intact mucosa with oedematous submucosa and multiple epithelioid granulomas in the serosa suggesting tuberculosis (Figure 3). No acid fast bacilli were seen. The patient is doing well at one year of follow-up.

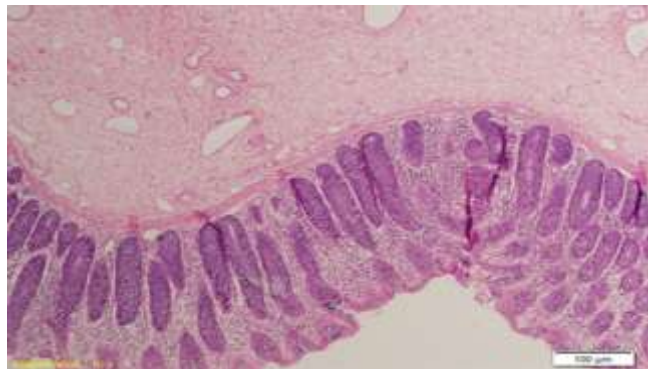


Figure 3 showing intact mucosa with edematous submucosa and multiple epithelioid granulomas in serosa.

III. Discussion

Gastrointestinal tuberculosis is overall less common than pulmonary TB. However in India and other developing countries such cases are commonly seen owing to the high prevalence of this disease.¹In upto one fourth of the cases gastrointestinal TB is associated with pulmonary TB.⁴The spread to gastrointestinal tract is commonly by ingestion, hematogenous or from adjacent organs. Because of the high lymphoid tissue content and longer transit time, small intestine, particularly ileum is the most common site of gastrointestinal tuberculosis which presents with ulcerations and luminal narrowing.^{4,5,6}In contrast colonic tuberculosis is mostly limited to case reports which is the reason why it is commonly misdiagnosed as colon carcinoma, inflammatory bowel diseases, ischemic colitis or infectious colitis.¹Nagi et al⁷ found involvement of the colon in only 10.8% of the 684 cases with abdominal TB. Mukewar et al¹ in their cohort study of 69 patients with gastrointestinal TB found descending colonic TB on approx 9% cases only. Immunocompromised and patients suffering from AIDS have higher incidence of colonic tuberculosis. Contiguous involvement of cecum along with ileum is the most common form of involvement of colon.⁸The conclusions about the second most common sites differ among various studies.

While Shah et al found transverse colon followed by rectum and then ascending colon as the sequence of involvement⁹; Mukewar et al identified ascending colon followed by transverse colon and descending colon as the most common site of colorectal TB¹. Sharma R¹⁰ found multifocal involvement in 28%-44% of cases with

colorectal TB. Our patient had no involvement of any other organ system and CECT as well as colonoscopic evaluation did not reveal any multifocal involvement of the gastrointestinal tract. This highlights the fact that isolated descending colonic tuberculosis may mimic carcinoma colon and should always be kept under differential diagnoses unless ruled out by appropriate investigations.

Clinical, laboratory tests, endoscopic findings and radiological signs and sometimes even the bacteriological and histopathological findings may not be able to conclusively diagnose or rule out a patient of tuberculosis. It is only a combination of radiological and histopathological studies which, if applied in an appropriate clinical situation may give satisfactory results. The histologic hallmark of TB is the caseation necrosis in granulomas. Multiple large granulomas of >200 µm, which coalesce in mucosa and submucosa are common in intestinal tuberculosis. Laboratory investigations may reveal raised erythrocyte sedimentation rate, anaemia and hypoalbuminemia.⁸

At least 6 months of antitubercular therapy with Isoniazid and rifampicin with pyrazinamide and ethambutol during the intensive phase is the recommended as per Revised National Tuberculosis Control Programme which may be extended from 6 months to 9-12 months on individualized basis¹¹. The effectiveness of various regimes is found to be comparable for treatment of tuberculosis¹².

There are three types of surgeries done for complications of intestinal tuberculosis¹¹. A bypass procedure to relieve obstruction or to bypass a certain segment of intestine is done by entero-enterostomy or ileotransverse anastomoses. Unfortunately these surgeries are jinxed with blind loops syndrome, fistula formation and recurrent disease in the remaining segments and hence not preferred in elective setting. Resection of the intestine is the second form of treatment currently facilitated by effective antitubercular therapy but not done in malnourished patients or those with extensive disease, which is the case in a major chunk of patients. The third type of surgeries like stricturoplasty is conservative procedures and preferred now-a-days. However in an occasional patient like ours with malnutrition and persistent anaemia of blood loss surgery in the form of a conservative resection of colon is sometimes the demand of the condition once the symptoms persist post antitubercular therapy.

IV. Conclusion

Left sided colonic tuberculosis is a relatively rare but important differential diagnosis of colonic carcinoma. Given the prevalence of tuberculosis in Indian population it is important to keep this entity in mind while evaluating a patient with left colonic symptoms. Antitubercular therapy followed by elective surgery for stricture leads to good outcome.

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