

Isolated caecal tuberculosis presenting as hard right iliac fossa lump mimicking neoplastic growth in young female: case report

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Abstract: India is a country with highest burden of tuberculosis. Intestinal tuberculosis accounts for around 28 lakhs of cases which can involve any part of intestine. However ileocaecal region is most commonly involved. Some cases have been reported with isolated caecal tuberculosis. Diagnosis is extremely difficult as clinical presentation is very variable. We report a case of young female patient with isolated caecal tuberculosis that presented as circumferential ulceroproliferative lesion in the caecal region mimicking the malignancy.

Keywords: Ileocaecal tuberculosis, Caecal carcinoma, Antitubercular treatment

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I. Introduction

Tuberculosis is a life threatening disease which can virtually affect any part of body. According to world health organization report 2015 there were an approximately 8.6 million annual incidence of TB globally and 1.3 million people died from it. India has world largest TB cases which accounts for around 26% followed by china and south Africa. Prevalence of TB has increased in both immunocompetent as well as immunocompromised and it can virtually involve any organ. Primary site of tuberculosis is usually lungs. The abdominal tuberculosis can be a source of significant morbidity and mortality and is usually diagnosed late due to its nonspecific clinical presentation[1]. Approximately 15%-25% of cases with abdominal TB have concomitant pulmonary TB. Hence, it is quite important to identify these lesions with high index of suspicion especially in endemic areas.

II. Case Report

A 35 yrs. female patient was admitted with complaint of pain and swelling in right iliac fossa since 1 month associated with weight loss of around 7 kg in one month. She had been previously managed conservatively one month back suspecting it appendicular lump but lump didn't resolve. There was no history of anorexia, fever, altered bladder and bowel habits, no significant family history. On general physical examination patient was afebrile with normal vitals and on abdomen examination there was tenderness localized to right iliac fossa with palpable hard lump. Lump was of 3x3 cm in size and superficial inguinal lymph node were enlarged bilaterally. No organomegaly was present, no cervical lymphadenopathy. Digital rectal examination was normal. Laboratory test revealed anemia (Hb 8.0gm%), ESR 65 mm. Transabdominal USG revealed thickening of ileo-caecal junction with caecal thickening with surrounding echogenicity of mesentery and few hypoechoic mesenteric lymph nodes at right iliac fossa. CECT abdomen revealed small calcified retroperitoneal lymph node with circumferential thickening seen in terminal ileum with ileo-caecal junction involvement, proximal ileum appears dilated, hypo density suggestive of appendicular lump seen posterior to distal ileum (FIG 1). Colonoscopy was done but patient was highly uncooperative and scope cannot be passed beyond the hepatic flexure. No tissue biopsy can be taken, superficial inguinal lymph node biopsy was suggestive of reactive hyperplasia. Since her history, clinical findings and radiological investigations were very suspicious of malignancy, so she was planned for right hemicolectomy. A growth was found involving the caecal region reaching upto serosa and multiple hard lymph node were present in the mesentery at terminal ileum. On cut section ileum was normal and on caecal region a obstructive hard grey white ulceroproliferative lesion identified measuring 4x4 cm. On histopathological examination, microsections examined from this specimen shows mucosal ulceration, inflammatory infiltrate and epithelial cell granuloma with Langhan's giant cells. Six lymph nodes were identified suggestive of caseating necrosis, ZN staining was positive with 20% H₂SO₄, diagnosis of intestinal tuberculosis was made and patient started on antitubercular treatment.



FIG 1. showing preoperative CT scan finding of patient

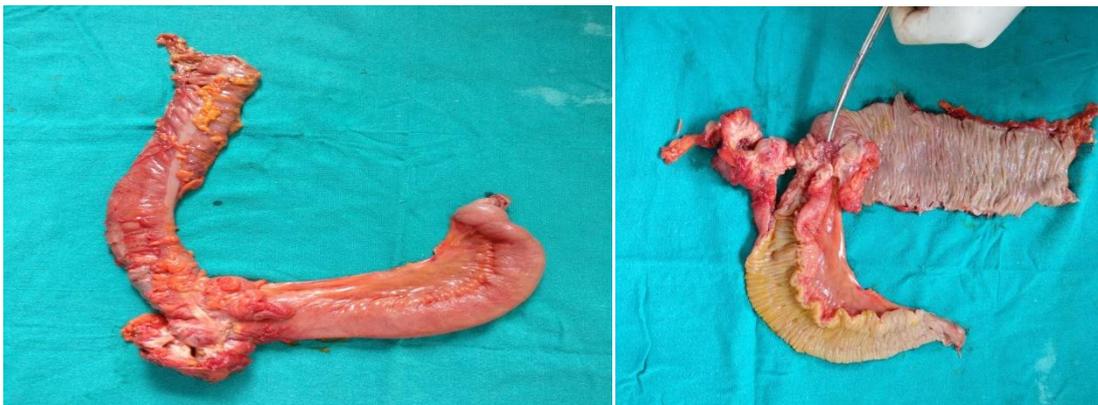


FIG 2. showing specimen of right hemicolectomy on cut section ileum is normal while there is ulceroproliferative growth in caecum

III. Discussion

Intestinal tuberculosis accounts for 15-20 % of cases of abdominal TB in India and is attributed mainly to hematogenous dissemination or direct extension from adjacent structures. Most common presenting symptoms includes anorexia, weight loss, fever, altered bowel habits which are non-specific [2]. The differential diagnosis includes malignancy, TB, inflammatory bowel disease. High index of suspicion with combination of clinical, radiological and colonoscopic biopsy are considered useful for diagnosis [2]. Basic blood investigations are useful but nonspecific. The abdominal TB usually presents in four forms: tuberculous lymphadenopathy, peritoneal tuberculosis, gastrointestinal (GI) tuberculosis and visceral tuberculosis involving the solid organs. Usually a combination of these findings occurs in an individual patient. Computed tomography (CT) is imaging modality of choice in the detection and assessment of abdominal tuberculosis.

Isolated involvement of colon is 10.8% [3]. The incidence is increased in the immunocompromised patients. Caecum is the most common site of involvement of colon but it is usually involved in contiguous involvement with the terminal ileum and IC junction. Apart from caecum, the most common site of isolated or segmental colon involvement varies between different studies. In one study, the most common site of involvement was transverse colon followed closely by rectum and ascending colon [4]. While it was ascending colon followed by transverse colon and descending colon in another study [6]. Multifocal involvement is seen in 28%-44% of cases with colorectal tuberculosis [5].

The most common clinical features are abdominal pain followed by loss of weight and appetite and altered bowel habits. During colonoscopy, the most common finding of colorectal TB is presence of ulcers, which are linear/fissured, transverse or circumferential and are covered with dull white or yellow exudates [6].

The imaging in earlier stage can be nonspecific and include spasm and hyper motility of the intestine. Since the clinical features of the colorectal tuberculosis can be nonspecific, the patients usually present in a later stage. So the more common radiological features are presence of strictures. So, a diagnosis of colorectal tuberculosis should be based on high index of suspicion and should be proven by colonoscopy guided biopsy and demonstration of caseating granulomas in the tissue. Majority of the lesions of colorectal tuberculosis show

resolution following antitubercular therapy and therefore a repeat colonoscopy may not be required if the patient is asymptomatic after treatment [7].

In our case colonoscopic biopsy cannot be done, on clinical and radiological grounds right hemi colectomy was done and was started on confirmation with histopathological report.

Untreated colonic tuberculosis can lead to perforation, obstruction, fistula, stenosis [8]. Conventional treatment is antitubercular drugs and surgery is reserved for complicated cases

IV. Conclusion

A hard lump in right iliac fossa can be tubercular in origin even in the absence of constitutional symptoms suggestive of the same. Diagnosis of isolated caecal tuberculosis can be challenging hence requiring a high index of suspicion.

References

- [1]. Alvares JF, Devarbhavi H, Makhija P, et al. Clinical, colonoscopic, and histological profile of colonic tuberculosis in a tertiary hospital. *Endoscopy* 2005;2013:351–6
- [2]. Tai WP, Hu PJ, Zhai HZ, et al. The clinical analysis of 34 cases of intestinal tuberculosis in China's big city hospitals. *Int J Colorectal Dis* 2011;2013:1339–43
- [3]. Rasheed S, Zinicola R, Watson D, et al. Intra-abdominal and gastrointestinal tuberculosis. *Colorectal Dis* 2007;2013:773–83.
- [4]. Shah S, Thomas V, Mathan M, Chacko A, Chandy G, Ramakrishna BS, Rolston DD. Colonoscopic study of 50 patients with colonic tuberculosis. *Gut*. 1992;33:347–351.
- [5]. Sharma R. Abdominal Tuberculosis. *Imaging Science Today* 2009: 146.
- [6]. Mukewar S, Mukewar S, Ravi R, Prasad A, S Dua K. Colon tuberculosis: endoscopic features and prospective endoscopic follow-up after anti-tuberculosis treatment. *ClinTransl Gastroenterol*. 2012;3:e24.
- [7]. Nagi B, Kochhar R, Bhasin DK, et al. Colorectal tuberculosis. *Eur Radiol* 2003;2013:1907–12
- [8]. Jain D, Aggarwal G, Lubana P, et al. Primary tubercular caecal perforation: a rare clinical entity. *BMC Surg* 2010;2013:12