

Ileocecal Tuberculosis – A Diagnostic Challenge¹Dr. Md. Moyeed Hussain, MBBS, General Physician, Kolkata**Corresponding Author:** Dr. Md. Moyeed Hussain, MBBS, General Physician, Kolkata**Type of Publication:** Case Report**Conflicts of Interest:** Nil**Abstract**

The ileocecal region is the most common site of tuberculous involvement in the gastrointestinal tract. Though generally rare, ileocecal TB remains a life-threatening disorder if undiagnosed. This disease may often pose as a diagnostic challenge because of its nonspecific features and resemblance to other abdominal pathologies which may lead to diagnostic delays and development of untoward complications. In tuberculosis endemic countries like India, it is important to suspect intestinal tuberculosis in patients presenting with vague symptoms of anaemia, abdominal pain and having multiple ulcers with scarring and stricture formation in ileum. Here, a case of a 32-year old woman who presented with non-specific symptoms and was diagnosed and treated successfully for ileocecal tuberculosis.

Keywords: Ileocecal tuberculosis, non-specific symptoms, ulceration, colonoscopy

Introduction

Tuberculosis (TB) is one of the top 10 causes of death, globally and remains a worldwide affliction despite the discovery of the causative organism more than a century ago. TB primarily involves the lung, but other parts of the body can be affected by the disease. Extrapulmonary tuberculosis may occur in about 20% of tuberculosis¹ while abdominal tuberculosis constitutes about 10% of extra-pulmonary tuberculosis². The ileocecal region is the most common site of tuberculous involvement in the gastrointestinal tract.³ Though generally rare, ileocecal TB

remains a life-threatening disorder if undiagnosed. This disease may often pose as a diagnostic challenge because of its nonspecific features and resemblance to other abdominal pathologies which may lead to diagnostic delays and development of untoward complications. Imaging plays a very important role in diagnosis of this condition as it enables its early recognition. After establishing the diagnosis, prompt initiation of treatment reduces morbidity and mortality as it is a treatable disease. Majority of the patients respond very well to the standard antitubercular regimen; however, surgery is required in a minority of patients.⁴ Here, I report a case of a 32-year old woman who presented with non-specific symptoms and was diagnosed and treated successfully for ileocecal tuberculosis.

Case Report

A 32-year-old female patient reported to my clinic with chief complaints of intermittent abdominal pain, nausea, excessive tiredness, lethargy, anorexia and an unexplainable loss of 10Kg weight for 6 months. Patient gave no history of fever, diabetes, hypertension, tuberculosis, any surgeries or any other chronic medical illness or medication. No history of diarrhoea or bloody stools present. She had consulted several doctors over the past few months without any obvious relief. All her routine blood tests were normal except for an elevated ESR (52mm in the 1st hour) and mild anaemia (Hb% - 9.5g/dl). On examination, blood pressure was 118/62 mmHg, pulse rate was 74 beats per minute, and

temperature 36.4-degree Celsius. On examination, pallor was present as evidenced from inspection of palpebral conjunctiva. On examination of cardiovascular and respiratory system no abnormality was detected. On abdominal examination, mild tenderness present in the right iliac quadrant and was doughy in consistency, otherwise the other areas of the abdomen were soft on palpation and no organomegaly or mass could be detected. No signs of acute abdomen were present. Plain chest X-rays were normal. HIV and HBsAg tests were negative. Patient was advised Ultrasonography of the whole abdomen which revealed several scattered enlarged mesenteric lymph nodes and thickening of the walls of the ileum and the caecum. Though the patient denied prior contact with tuberculous patients, a provisional diagnosis of extrapulmonary abdominal tuberculosis was made and the patient was advised to undergo colonoscopy. Colonoscopy revealed a linear ulcerated zone with loss of normal morphology between the terminal ileum and the caecum. Some areas showed scarring with healing. Since the financial condition of the patient was poor and the patient was unwilling to go for further examinations, a diagnosis of ileocecal tuberculosis was made based on the clinical, ultrasonographic and colonoscopic examinations. The patient was started on the standard four drug regimen anti tubercular drugs consisting of isoniazid, rifampicin, pyrazinamide and ethambutol. The patient showed signs of improvement after 15 days post treatment and started regaining her lost weight after a month. She was completely symptom free and doing well after a follow up of 3 months.

Discussion

Ileocecal tuberculosis is a rare extrapulmonary variety of tuberculosis, with an increasing incidence in the last decades, especially in developing countries like India. It should be considered in the differential diagnosis for

patients who are residents of or have travelled recently to countries where TB is endemic, and who present with non-specific abdominal complaints and weight loss over a prolonged period of time.⁶ This condition almost always presents with a diagnostic challenge, and it is difficult to make the correct differential diagnosis as it often mimics Crohn's Disease and other neoplastic diseases.⁵

Careful interpretation and combination of clinical, radiological, endoscopic, and histological features are necessary for differential diagnosis between Ileocecal TB and Crohn's Disease. Previous pathologic and clinical surveys have revealed that though tuberculosis can involve any segment of the gastrointestinal tract, there is a striking preponderance for the ileocecal valve and the adjacent ileum and cecum as seen in about 90% of cases.⁷ The initial pathologic process, called epithelioid tubercle, is located in the lymphatic tissue of the submucosa. Within 2-4 weeks, it undergoes caseous necrosis, which leads to sloughing of the overlying mucosa and the development of an ulcer. The process continues to extend, ulcerations coalesce, and by the lymphatic route spread to the adjacent mesenteric lymph nodes.³ Hence, extensive involvement of the adjacent regional nodes, as revealed in the Ultrasonography of this patient is a well-recognized pathologic feature^{7,8,9,10}. The wall of the caecum is often found to be thickened and the surrounding nodes are matted and adhere to the wall of cecum and terminal ileum, forming an inflammatory mass, giving a doughy consistency on palpation as in our patient. Sato et al.¹¹, classified endoscopic findings of ITB in four types: Type 1 showing linear ulcers with circumferential arrangement with a nodular mucosa; Type 2 showing irregular, rounded ulcers without nodules; Type 3 multiple erosions limited to colon; and Type 4 aphthous ulcers limited to the ileum. In this case, the patient presented with type 1 findings.

Sometimes, therapeutic trial of anti-TB treatment might be helpful in differential diagnosis, especially when performing expensive diagnostic tests are not financially feasible. In tuberculosis endemic countries like India, it is important to suspect intestinal tuberculosis in patients presenting with vague symptoms of anaemia, abdominal pain and having multiple ulcers with scarring and stricture formation in ileum. The treating physicians should learn to recognize and learn to make the differential diagnosis of these diseases correctly, particularly because Ileocecal TB is a treatable disease when the appropriate treatment is initiated early.

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How to citation this article: Dr. Md. Moyeed Hussain, "Ileocecal Tuberculosis – A Diagnostic Challenge", IJMACR- September - October - 2020, Vol – 3, Issue -5, P. No. 60 – 62.

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