



ILEO-CAECAL SPARING PRIMARY ABDOMINAL TUBERCULOSIS WITH OBSTRUCTION: A RARE CASE PRESENTATION

Dr. P. Karthikeya* MBBS, MS General Surgery*Corresponding Author

Dr. I. Kamlesh MBBS, MS General Surgery,

Dr. S. Sushama MBBS, MS General Surgery,

ABSTRACT **Introduction:** Gastrointestinal tract is one of the primary sites of tuberculosis, Ileo-Caecal junction is the most common site involved. Patients may be asymptomatic, if symptomatic may present with vague symptoms or sometimes with features of acute intestinal obstruction. Primary intestinal tuberculosis with sparing of Ileo-Caecal junction was a rare presentation. Surgical intervention is indicated only if any complications do arise. Case presentation: we report a case of abdominal tuberculosis where initial presentation suggested features of bowel obstruction. Patient was a 54 year elderly female, presented with features of acute small bowel obstruction. Explorative laparotomy was performed and stricture was resected and histopathology confirmed the diagnosis of Koch's etiology. Patient was started on anti-tuberculosis therapy along with regular wound care. Patient was on regular follow up with no complications, recovery is uneventful. **Conclusion:** abdominal tuberculosis presents with nonspecific symptoms which often misleads to diagnosis of malignancy until proven by radiological imaging or histopathological confirmation. Proper diagnosis is needed with immediate use of pharmacological therapy to control further complications.

KEYWORDS : abdominal tuberculosis, obstruction, Ileo-Caecal junction.

Introduction

Tuberculosis is one of the most ancient diseases known to humans; its manifestations vary from mild to life threatening disease. It can affect almost every organ producing wide range of symptoms and complications. Pulmonary TB is considered to be the primary site of infection from it disseminated to other parts. The diagnosis of extra pulmonary TB is difficult as it present with non-specific clinical and radiological signs. Abdominal TB usually has a delayed presentation and mimics malignancy. The incidence ranges from 11% to 16%, only 29% of these cases have active lung pathology. The incidence of obstruction varies from 12% - 60% in cases of abdominal tuberculosis¹.

In India 3%-20% of all obstruction cases are of tuberculous etiology. Ileo-Caecal region is the most common site involved in intestinal form of tuberculosis with incidence of 52%-85%¹.

Abdominal tuberculosis usually presents in different forms (1) Tuberculous lymphadenopathy, (2) peritoneal tuberculosis, (3) gastrointestinal (GI) tuberculosis and (4) visceral tuberculosis involving the solid organs.

Case Report

A 54 year elderly female was admitted in general surgery department with complaint of swelling in supra-umbilical region since 2 months. She had a history of bilious vomiting, 10 episodes for 1 day containing some food particles, which was associated with pain abdomen. She had a history of generalized abdomen distension since 6 months, associated with swelling of both legs since 4 months along with loss of weight. There is no history of fever, constipation.

She was a known hypertensive and is on regular medications and not a known diabetic, no history of other chronic diseases such as asthma, thyroid disorders. No history of any addictions and family history was nil significant. She underwent tubectomy 25 years back.

Vitals of the patient were in normal range with 98.6oF temperature, pulse rate of 86 beats per minute, respiratory rate of 20 breaths per minute and blood pressure of 130/90 mm Hg.

On general physical examination, patient was conscious, coherent and well oriented to time place and person. No physical signs suggestive of anemia, jaundice, clubbing of finger nails, lymphadenopathy were present. Pedal edema is present in both legs pitting type.

On examination, abdomen was soft, distended, swelling of size 2x2 cms present above the umbilicus.

Reducible in nature and mild tenderness present over the abdomen. Cough impulse is present.

Ultrasound of abdomen showed minimal ascites and supra-umbilical hernia with a defect size of 2.5cms in anterior abdominal wall, with herniation of peristaltic bowel with ascetic fluid as content.

Patient underwent CT scan with contrast enhancement which revealed obstructed hernia just above the level of umbilicus with proximal small bowel obstruction showing early changes of vascular compromise.

Blood investigations showed normal peripheral smear, normal hepatic, renal and thyroid functions.

Erythrocyte Sedimentation rate ESR was 53(normal 0-30 mm/hr). Electrocardiograph showed normal rhythm. Chest X ray was unremarkable.

Patient was posted for emergency explorative laparotomy. Abdomen showed multiple tiny tubercles around the bowel, Omentum, mesentery and peritoneum. A blackish incomplete band of 1 cm thickness is present over proximal ileum. No other strictures or constriction bands are present over remaining bowel. No involvement of Ileo-Caecal growth is observed. Multiple inter-loop adhesions are present all over the bowel. No malignant growth is seen.

Peritoneum, hernia sac, Omentum and ascetic fluid are sent for analysis and biopsy.

Ascitic fluid LDH value is >1000 U/L, Serum LDH 156U/L (normal range 313-618 U/L),

Ascitic fluid ADA 29.9 U/L (normal range <40U/L), Ascitic fluid glucose- 88mg/dl, Ascitic fluid proteins-5.9 g/dl. Total WBC count in Ascitic Fluid is 750 cells/cumm(Neutrophils 20 Lymphocytes 80). Biopsy showed Koch Etiology.

Patient was started on Isoniazid 5mg/kg, Rifampin 10mg/kg, Ethambutol 15 mg/kg and Pyrazinamide 25mg/kg.

Patient is on regular follow up and remained free of complications and no relapses.

Discussion:

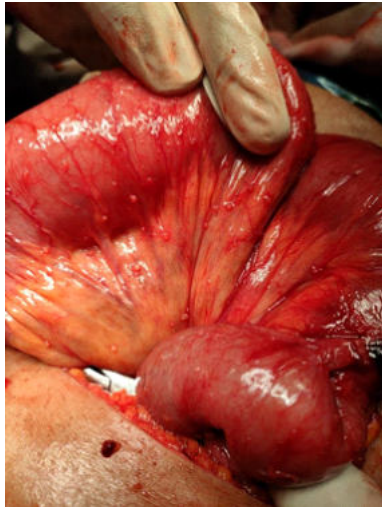
According to World Health Organization, annual incidence of TB worldwide is estimated to be around 9.4 million cases, out of which 1.98 million cases are from India 2, and close to 500,000 per year will die of the disease in India².

Abdominal TB manifests similar to malignancy with clinical presentation of weight loss, abdominal pain, features of acute intestinal obstruction³. It is most common complication of intestinal tuberculosis. Ileo-Caecal is most common site of involved in intestinal

tuberculosis⁴. Hypertrophic form is the most common type causing constriction of lumen⁴. Affinity of bacilli to lymphoid tissue, physiological stasis leading to prolonged exposure of bacilli to mucosa may be the reason for Ileo-Caecal region to be the most common site to be involved⁴. Colonic tuberculosis presents as inflammatory stricture, hypertrophic lesion or segmental colitis.

Our patient was posted for emergency explorative laparotomy, on exploration of bowel loops, there are features of obstruction due to inflammatory stricture which was present around the proximal Ileum, with sparing of Ileo-Caecal junction leading to dilatation of proximal bowel loops with collapse of distal bowel loops. Nodules are present all over the peritoneum, mesentery and bowel making the diagnosis of abdominal tuberculosis which is confirmed by histopathological examination. Ileo-Caecal junction was not involved in our case which was an atypical presentation. After relieving the obstruction abdomen was closed and pharmacological therapy was initiated.

Surgical intervention is indicated only in case of complications as in cases of abdominal tuberculosis and the treatment of choice is always anti-tubercular drugs.



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