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A Rare Presentation of Abdominal Tuberculosis (Ventral Hernia with Obstruction)

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ABSTRACT
Abdominal tuberculosis continues to be a major problem in many regions of the world. The lack of specific signs and symptoms of abdominal tuberculosis involving the intestinal tract frequently leads to missed or delayed diagnosis. They are usually present with weight loss, abdominal pain and bowel disturbance or in severe complications like obstruction, perforation, and fistula formation. Though presenting ventral hernia is uncommon hence we present such a case of ventral hernia with obstruction caused by abdominal tuberculosis in a 56 year old male since it is an extremely rare complication.
Keywords: *Ventral hernia; Tuberculosis; Abdomen; obstruction.*

INTRODUCTION

Tuberculosis was a prevalent infection even in Ancient Greece and Egypt. The disease was put under control only after the advent of antimicrobial therapy in 1946. One-third of the world population is in risk of acquiring TB according to WHO and more than 30 million deaths due to TB were expected in the nineties, especially in Africa and Asia. 4 AT is one of the most prevalent forms of extra pulmonary disease. Peritoneal tuberculosis is a form of abdominal TB that involves the omentum, intestinal tract, liver, spleen, or female genital tract in addition to the parietal and visceral peritoneum. It accounts for about 1-2% of all cases of tuberculosis. As many as 1/3rd of the patients with abdominal tuberculosis may present with an acute abdomen[3,8] could be due to bowel obstruction, perforation or mass/ lumps. Acute intestinal obstruction or subacute obstruction, is the most common presentation, common reason for obstruction can be strictures, stenosis, adhesion band. We report a rare presentation of intestinal obstruction because of ulceration of parietal peritoneum and herniation of ileal loop into the ulcer (ventral hernia with obstruction) with multiple inters bowel adhesions. Abdominal tuberculosis 'has bizarre, chronic and insiduous type of presentation and difficult diagnosis. Furthermore, the investigations for this, may be

non-pathognomonic.[4] Due to the non-specific course of the disease there are great difficulties in its diagnosis. Various methods of investigation have been reported as gold standards; however, there are great difficulties in clinical practice. As a result, the diagnosis of PT is still a challenge to the clinician.

CASE HISTORY

A 56 y male patient of poor socioeconomic background, presented with the complain of dull pain in abdomen since 10 days, distention of abdomen, not passing motion and flatus and vomiting since 4 days. Also had similar episode of vague abdominal pain, with constipation in past 1 year. He had no history of cough, fever, loss of weight. He was averagely built and moderately nourished. On general physical examination, no abnormality was detected and the abdominal examination revealed generalized distention, tense abdomen, guarding and rigidity, bowel sound were absent. There were no hepatosplenomegaly or any mass felt. His Rectal examination was normal and his past medical and family history did not shed any light.

His routine haematological investigations and urine analysis were within normal limits.ESR was raised.

Chest X- ray was normal.

X-ray abdomen showed multiple air fluid levels suggestive of intestinal obstruction.

Abdominal ultra-sonography revealed dilated bowel in upper abdomen with no peristalsis, and peritoneal collection with no internal echos. In preoperative period no definitive diagnosis was made and patient was taken for laparotomy.

MANAGEMENT AND OUTCOME

His abdomen was opened through midline incision. Mild serous peritoneal collection was drained, an ileal loop was herniated in a defect of 3 x 3 cm on right side of mid line in spegilian belt region. Herniated loop was gangrenous, it was redused, resection anastomosis was done, hernia cavity was scooped and biopsy was taken and abdomen was closed after putting the drain. Histopathological examination showed reactive follicles of irregular shape and sinus histiocytes. A few foci of epithelioid granulomas with necrosis were also seen which were suggestive of tuberculosis. Polymerase chain reaction for microbacterium tuberculosis was positive. Post operative period was uneventful. Patient was started on Antitubercular medications for 6 months.

DISCUSSION

Tuberculosis (TB) is a global disease. Abdominal tuberculosis is known to human race since the times of Hippocrates.[1] The abdomen is the sixth most common extrapulmonary site of tuberculosis.[10,11] The distribution of tuberculosis among various abdominal organs and structures are following indecreasing order, peritoneum 61.50%, liver (16.60%);mesenteric lymph nodes (10.20%); small bowel (3.80%); colon (2.60%); spleen (1.30%); appendix (1.30%); pancreas (1.30%) and perianal region (1.30%).

Peritonial tuberculosis, a form of abdominal tuberculosis, occurs in three forms: wet type with ascites, dry type with adhesions, and fibrotic type with omental thickening and loculated ascites. There has been a trend in the change of morphology of tuberculosis as ileocaecal tuberculosis has become less common as compare to the small bowel Strictures, Peritoneal tuberculosis and colonic involvement with obstruction is seen more often. [4,5]Generally the onset is quite insidious, Common presenting signs and symptoms included abdominal pain, weight loss, vomiting, fever, abdominal distension, diarrhea, constipation, abdominal tenderness (peritonitis), ascites and abdominal mass. At the beginning of the 20th century, intestinal tuberculosis was the most common cause of small intestine obstruction and stricture. Abdominal tuberculosis may present clinically as an acute abdomen, either due to bowl obstruction, perforation or mass. The symptoms and signs of abdominal tuberculosis are often non-specific. This is not surprising since the disease

may involve multiple different sites within the abdomen, with different morphological patterns.

diagnosis in initial stages is difficult as the clinical features are vague, diverse and there is no specific diagnostic test. Apart from these common presentation, some rare cases are also reported such as Jejunojejunal Intussusception, peritonitis and enteroliths, Richter's hernia, etc. our case of VENTRAL HERNIA (SPIGELIAN)WITH OBSTRUCTION is also a rare presentation of this multifaceted disease.

SPIGELIAN hernia named after Adrian van der Spieghel (1578-1625), occurs through slit like defect in the anterior abdominal wall adjacent to the semilunar line. Spigelian hernia is in itself very rare and more over it is difficult to diagnose clinically. It has been estimated that it constitutes 0.12% of abdominal wall hernias. Symptoms can vary from abdominal pain, lump in the anterior abdominal wall or patient may have history of incarceration with or without intestinal obstruction. The diagnosis of a spigelian hernia is difficult; few surgeons suspect it, it has no characteristic symptoms, and the hernia may be interparietal with no obvious mass on inspection or palpation. Only 50% of cases are diagnosed preoperatively. [12,13]

The differential diagnosis includes appendicitis and appendiceal abscess, a tumor of the abdominal wall or a spontaneous hematoma of the rectus sheath or even acute diverticulitis.[15]

In our case there was formation of tubercular ulcer in peritoneal site of anterior abdominal wall in area of spigelian belt in which loop of ilium was herniated and got obstructed, presenting with symptom of intestinal obstruction.

The awareness of clinical presentation of abdominal tuberculosis shortens its diagnostic time and improves its management. Early diagnosis of PT is of major importance in the control of the disease. Chest X-rays show evidence of concomitant pulmonary lesions in less than 25 per cent of cases. Laparoscopy with direct biopsy is an excellent diagnostic method and must be considered for every patient with unexplained ascites. A definitive diagnosis requires identification of bacilli in ascitic fluid or peritoneum tissue. However, acid fast staining is usually negative and cultures are positivein 30-40% of cases, making bacteriological confirmation of the disease very difficult. Recently, advances in molecular techniques have provided a new approach to the rapid diagnosis of tuberculosis by nucleic acid probes and polymerase chain reaction (PCR).

Management is with conventional anti-tubercular therapy for at least six months. Significant number of patients with abdominal tuberculosis require surgical intervention. [16] The indications for surgery include intestinal obstruction, perforation, bleeding, and fistulae. Because of the varied and diverse morphology of the disease no single surgical procedure can be labeled as standard. Surgical procedures are therefore tailored according to the operative findings and patients conditions. However the resent trend toward less radical surgery.

CONCLUSION

Tuberculosis is chameleon among diseases. Clinical suspicion is foremost important in the diagnosis of the disease. While diagnosis of abdominal tuberculosis should always be kept in mind, a definite diagnosis needs careful and painstaking investigation. Increased awareness of the magnitude of the problem, a high index of suspicion, early case identification and treatment are required in order to prevent morbidity and mortality. Anti-tubercular chemotherapy is most important. Surgery is no longer recommended, either for confirming the diagnosis or as the first line approach to the management of uncomplicated abdominal tuberculosis. However, patients with acute and sub-acute intestinal obstruction, who do not respond to conservative measures, must be treated surgically. We in India need to keep this message always in mind as tuberculosis is one of our “National” disease*.

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