## CASE REPORT

## **Coexistence of Giant Tubercular Cyst of Transverse Mesocolon along with Perforated Tubercular Ulcer of Ileum: A Rare Entity**

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# ABSTRACT

Mesenteric cysts are usually discovered incidentally during routine abdominal examinations and they may present with nonspecific symptoms. There are different types of cysts but tubercular cyst is a rare variety. The management includes complete excision of the cyst to avoid recurrence, followed by anti-tubercular drug therapy. We report a case of tubercular cyst in relation to transverse mesocolon, which was incidentally found in a patient who presented with features of peritonitis due to perforation of tubercular ulcer of terminal ileum. The coexistence of tubercular mesocolic cyst along with perforation of tubercular ulcer in the terminal ileum is a rare form of presentation and both are managed surgically followed by anti-tubercular drug therapy to avoid recurrence.

Keywords: Giant Tubercular Cyst; Mesocolon; Tubercular Ulcer; Ileum; Peritonitis

#### **INTRODUCTION**

Mesenteric cysts (MCs) are rare intra-abdominal lesions with higher incidence of small bowel than the large bowel involvement [1]. Majority of these patients present with a palpable lump and others may present with nonspecific symptoms. The tubercular mesenteric cysts are rare forms of MCs and their coexistence with perforation of ulcer at terminal ileum is extremely rare. Due to such unusual coexistence, we are reporting this case.

#### CASE REPORT

A 36-year-old male patient presented to the emergency department with diffuse abdominal pain, abdominal distension, vomiting and absolute constipation for last three days. Abdominal examination revealed tense abdomen with classical rebound tenderness and absence of bowel sounds. X-ray chest showed air under the right dome of diaphragm. Total leucocyte count was 17,000/cu.mm, urea 52mg%, creatinine 2.1mg%. Rest of the laboratory findings were within normal limits. Ultrasonography of the abdomen incidentally suggested a large cyst in relation to colon, stomach or spleen; however, no definite relation of the cyst could be visualized. There was free fluid in the abdomen with internal echoes suggestive of perforation of bowel. Exploratory laparotomy was performed and a large perforation of about 3 cms in length was found in the terminal ileum, approximately one foot from the ileocecal junction, with gangrene

**Figure 1:** Intraoperative picture showing a large perforation of about 3cms in the term -nal ileum with gangrene and inflammation of adjacent bowel



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and inflammation of adjacent bowel (Figure 1). In addition, a large cyst of about 15\*12 cms was found in relation to transverse mesocolon (Figure 2) along with multiple, soft to firm mesenteric lymph nodes of size 1-2 cms. The cyst was excised after separating it from adhesions and it contained whitish fluid: however, it ruptured during excision. The perforated site of ileum along with adjacent gangrenous bowel was resected and the ends were taken out as ileostomy and distal mucus fistula. Postoperative period was uneventful and the ileostomy was closed after two and half months. Histopathological examination of the resected bowel and cyst wall showed the presence of epitheloid granulomas, histiocytes, Langerhans giant cells and caseation necrosis. The culture of the fluid from the cyst was sterile. The diagnosis of tubercular cyst and perforation was made and the patient was started on anti-tubercular drugs including isoniazid, rifampin, pyrizinamide and ethambutol for the first two months followed by isoniazid and rifampicin only for the next ten months. It is interesting to note that the patient did not have any past history of tuberculosis and no such focus was evident in the lungs. The patient is doing well in the follow-up period.

#### DISCUSSION

MCs are more common than the omental cysts and according to the available literature the ratio is 4.5 to 1, with a higher incidence in females [2]. MCs are more commonly chylolymphatic and enterogenous than the urogenital remnants and teratomatous cyst [3]. They may be unilocular or multilocular and contain fluid which varies from a clear, straw-colored liquid to a thick cheesywhite material. MCs may extend from the base of mesentery into the retroperitoneum and any part of gastrointestinal tract from the duodenum to the rectum may get affected. 60% of these cysts are found in the small intestine and 40% in the colon [1]. Cysts involving the transverse mesocolon are very rare especially tubercular mesenteric cysts [4]. The omental cysts may present as acute abdomen almost exclusively in children due to torsion and infection [5]; however, MCs rarely present as acute abdomen and majority of patients present as a palpable abdominal mass [6, 7]. Although the preoperative diagnosis of cysts and their extension can be made by ultrasound or CT scan, histopathological examination of the cysts is essential to confirm the diagnosis [8, 11]. There are different treatment options such as excision, enucleation, marsupialization and drai**Figure 2:** Intraoperative picture showing a large cyst of about 15\*12 cms in relation to transverse mesocolon



nage but excision of cyst along with preservation of surrounding vital structures is the treatment of choice to avoid recurrence [9] and anti-tubercular drugs should be started postoperatively as soon as possible in case of tubercular cysts [10]. The coexistence of tubercular mesocolic cysts alongwith perforation of tubercular ulcer in the terminal ileum has not been discussed in the available literature. Although generalized peritonitis may occur in cases of perforated tubercular ulcer, exploratory laparotomy with resection of the affected segment of small bowel and end to end anastomosis is the treatment of choice and primary closure of the perforation should be avoided due to high risk of leak and fistula formation [12].

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### CASE REPORT

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