A Rare Case of Tuberculous Mesenteric Cyst Masquerading as Chylolymphatic Mesenteric Cyst


Abstract
Mesenteric cysts are one of the rarest abdominal tumours. Majority occur in the mesentery of the small bowel, followed by mesentery of the sigmoid colon. Mesenteric cysts of transverse colon occur rather infrequently and tuberculous affection of the same is a rarity in itself. We report a case of mesenteric cyst of the transverse colon which turned out to be tuberculous in origin. The presentation and related literature is discussed.

Introduction
Mesenteric cysts are rare intra-abdominal lesions arising with an incidence of 1/100,000 admissions in adults and 1/20,000 in children. Many authors consider mesenteric, omental, and retroperitoneal cysts as one group because they derive from the same embryological structures. According to traditional teachings mesenteric cysts are chylolymphatic and enterogenous cyst, with a few being urogenital remnants and teratomatous cyst. Tuberculous mesenteric cysts are rare with a few being described in the available medical literature.

According to Behrns, mesenteric cysts can be urogenital, enteric, traumatic, mycotic, parasitic and very rarely tuberculous cyst.

We report a rare case of a 33 year old male patient presenting with an abdominal lump. Exploratory laparotomy with histopathology of resected specimen proved it to be a tuberculous mesenteric cyst of the transverse colon. It is the first reported case in Indian medical literature.

Case Report
A 33 year old male patient, presented to us with complaints of epigastric pain and gradually increasing lump in upper abdomen.

Pain was dull aching not associated with vomiting. No other symptoms like diarrhoea, constipation, haematemesis or melaena. He had history of decreased appetite along with loss of weight of up to 10 kg over the last 6 months with low grade fever off and on. There was no past history of tuberculosis.

Examination revealed a well defined, non tender intraperitoneal lump in the epigastrium measuring 12 x 12 cms approximately, with smooth surface and well defined margins. The mass had restricted mobility.

His ultrasonography (USG) revealed a cystic lesion in mesentery with a few internal echos. Computed tomography (CT) scan, revealed a well defined hypodense non enhancing lesion with mildly enhancing wall, noted in region of mesentery of transverse colon measuring 12 x 12 x 8 cms, with a few septate inside the mass (Fig. 1). Hence a differential diagnosis as mesenteric cyst or Hydatid cyst was given.

Exploratory laparotomy revealed a large cyst in the transverse colon adhered to the greater curvature of the stomach and the duodenum. The cyst was excised in toto after carefully delineating its attachments and separating its adhesions. The cyst contained yellowish white fluid with shaggy wall.

Postoperative recovery of the patient was
uneventful. Histopathology of the specimen was suggestive of tuberculous inflammation of the cyst. Patient was started on Antikoch’s treatment for a period of 9 months.

Follow up of 1 year has shown him to be disease and symptom free.

Discussion

As proposed by Gross,\(^3\) Mesenteric cysts are thought to represent benign proliferation of ectopic lymphatics that lack communication with the normal lymphatic system. Mesenteric cysts can occur anywhere in the mesentery of the gastrointestinal tract from the duodenum to the rectum, and they may extend from the base of mesentery into the retroperitoneum.\(^4\) They occur with a frequency of 60% in the small intestine and 40% in the colon. Cysts involving the transverse mesocolon are very rare. Mesenteric cysts being twice common in women than in men.

Chylolymphatic mesenteric cysts are the most common arising due to sequestration of lymphatic ducts during development. These cysts contain clear lymph or less frequently with chyle varying in consistency from watered milk to cream. These cysts vary in sizes, occasionally attaining huge sizes,\(^4\) are mostly unilocular. These cysts have a blood supply independent of that of the adjacent intestine and hence enucleation is possible without the need for resection of the gut.

Tuberculous mesenteric cysts on the other hand are usually multilocular or multiple with associated mesenteric lymphadenopathy. The rarity of such mesenteric cyst makes them difficult to diagnose clinically.

The size of the cyst and age of patients influence the clinical presentation. The symptoms are variable, aspecific and include pain (82%), nausea and vomiting (45%), constipation (27%), or diarrhoea (6%).\(^6\) An abdominal Mass may be palpable in upto 61% of the patients. Diagnosis is usually made preoperatively with USG or CT Scan.

In conclusion tuberculous mesenteric cyst though being a rarity should be kept in mind, USG and CT scan can help to come to conclusion, however surgical excision followed by histopathology will only confirm the diagnosis.

References

5. Liron Pantanowitz, Maria Botero. Giant Mesenteric Cyst: A Case Report And Review Of The Literature. The Internet Journal of Pathology 2001 Volume 1 Number