Case Reports

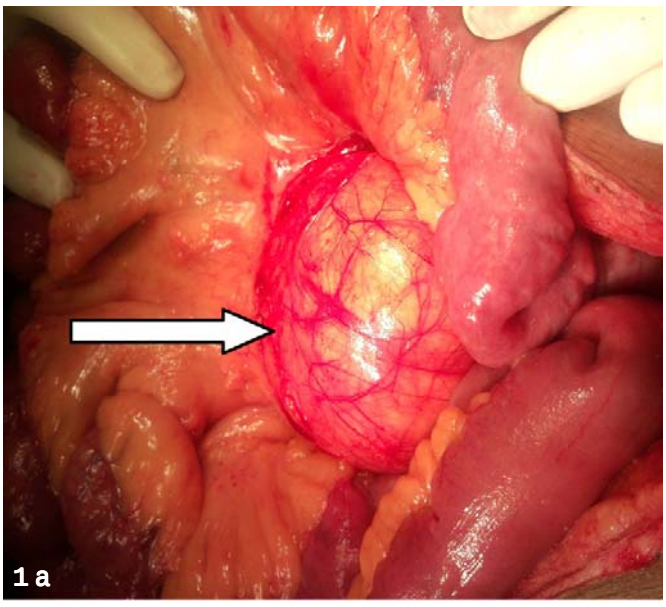
Chylolymphatic cysts of the mesentery

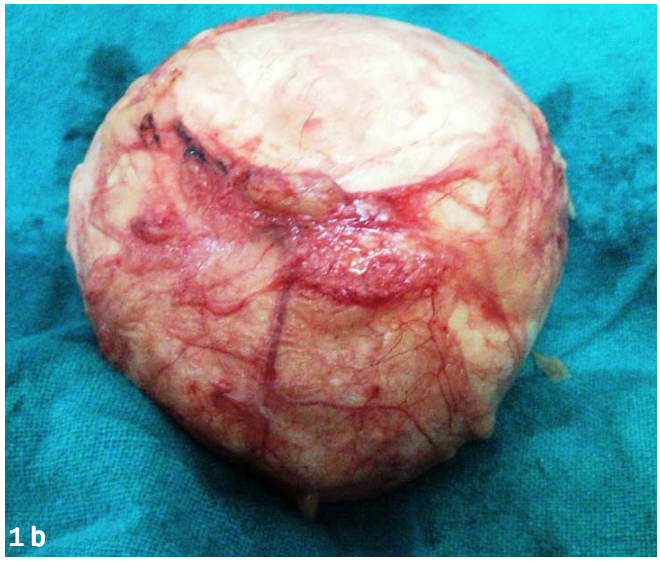
Introduction

Cysts of the mesentery are among surgical rarities.[1] The clinical presentation is not characteristic and in addition, the preoperative imaging although suggestive is not diagnostic. In most cases, the diagnosis is confirmed after surgical exploration and removal of the cyst. We report our experience in managing 2 patients with these cysts.

Case 1

A 59 year old man presented with abdominal pain of 5 months duration. The pain was of moderate intensity, localized to the epigastric region. He had no other complaints and his physical examination was unremarkable. His biochemical parameters including serum amylase and lipase were within normal range. He was evaluated with an ultrasound and subsequently a CT scan of the abdomen which revealed a hypodense lesion of fluid attenuation in the left upper abdomen, anterior to the left kidney, close to the duodenojejunal flexure, separate from the tail of the pancreas. With a provisional diagnosis of a mesenteric cyst, the patient was planned for surgery. On surgical exploration, a 10cm × 10cm cyst was seen arising from the





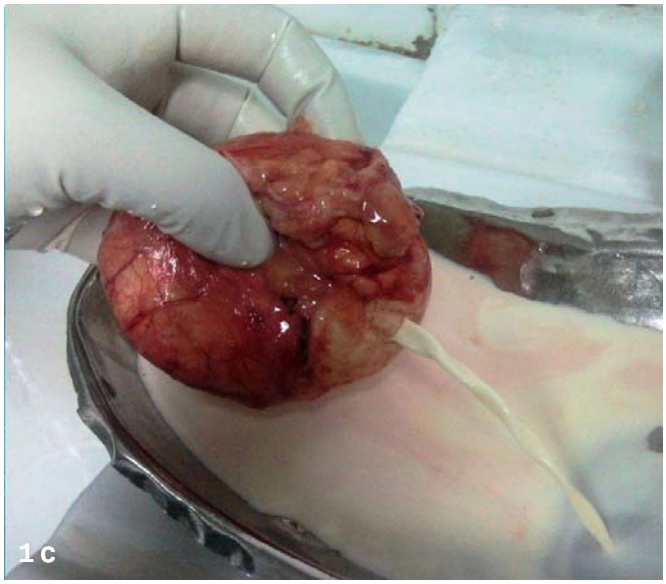


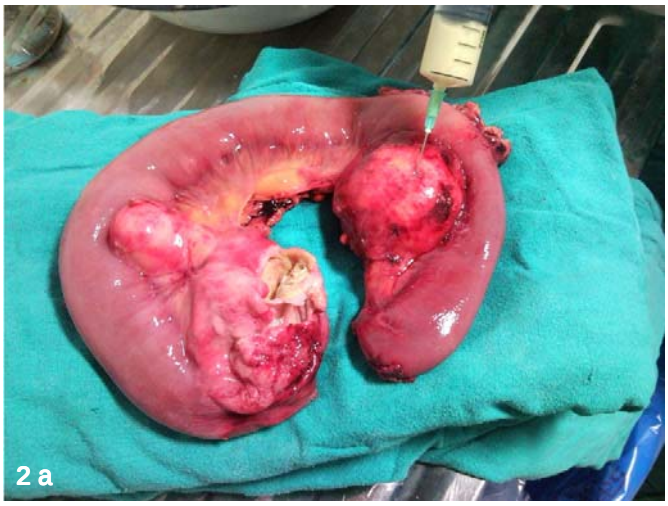
Figure 1: (a) Cyst arising from the proximal jejunal mesentery (arrow); (b): Enucleated cyst; (c): Milky white fluid content of the cyst

mesentery of proximal jejunum (**Figure 1a**). Few dilated lymphatic channels could be seen entering into the cyst. The cyst was enucleated (**Figure 1b**) from the mesentery. The cyst contained milky white fluid (**Figure 1c**) consistent with a chylolymphatic cyst. The diagnosis was confirmed on histopathology which revealed a cyst wall with lymphoid aggregates. After 9 months of follow-up, the patient is doing well and is symptom-free.

Case II

A 35 year old man presented with complaints of abdominal distension and abdominal pain of 9 months duration. The pain

was localized to the epigastrium and was of moderate intensity. Abdominal examination revealed a large cystic swelling in the left upper abdomen. The patient had been operated for the same complaint at a different hospital 3 months back, with a diagnosis of pancreatic pseudocyst, and a drainage procedure for the cyst had been performed. His symptoms however persisted. He was evaluated with an ultrasound and subsequently a CT scan of the abdomen which revealed 3 large cysts in the abdomen, bulging from the anterior abdominal wall, separate from the adjacent viscera. However, the exact site of origin of the cysts could not be determined. Hydatid serology (by ELISA), cyst-fluid cytology, and cyst-fluid amylase were within normal limits. On surgical exploration, 3 large cysts were found arising from the mesentery of the proximal jejunum, in close proximity to the superior mesenteric artery. Aspiration of the cysts revealed milky-white fluid (**Figure 2a**). The cysts were resected with a segment of the jejunum (**Figure 2b**). Histopathology revealed a cyst wall with foamy macrophages and lymphoid aggregates (**Figure 3a,3b**).



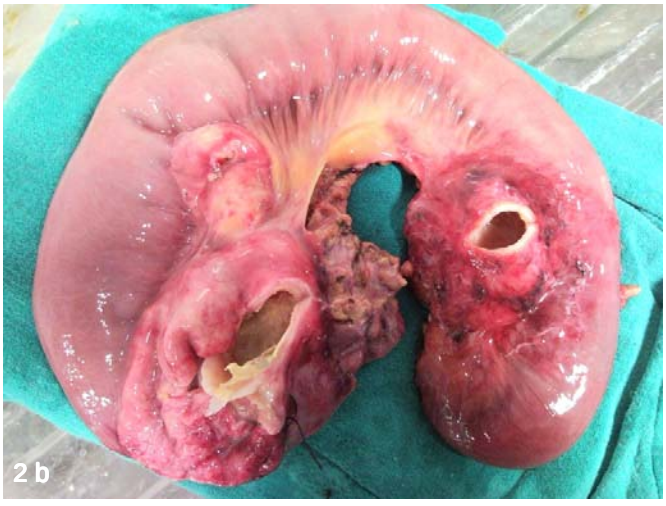
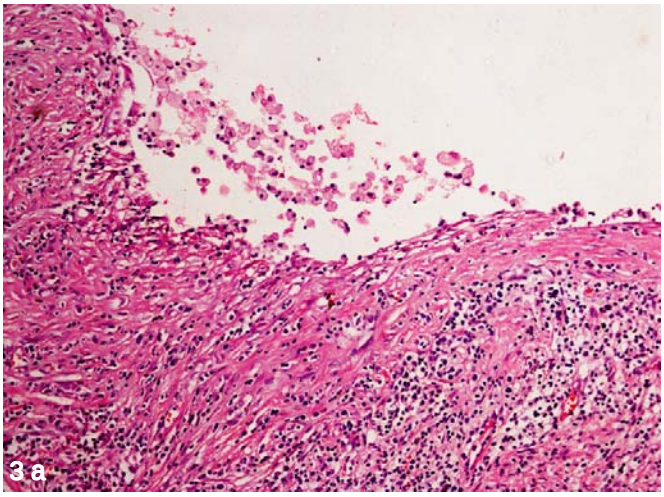


Figure 2: (a) Aspiration of milky-fluid from the cyst, (b): Resesected jejunal segment with mesenteric chylolymphatic cysts

The patient had an uneventful recovery and at a follow-up of 6 months, the patient is symptom-free, without evidence of recurrence.



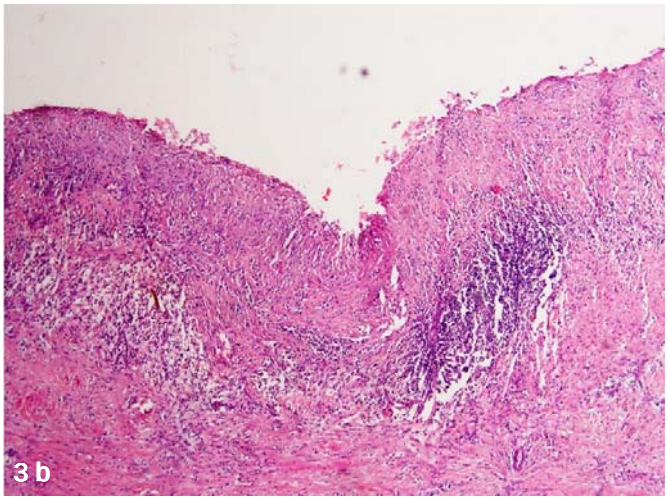


Figure 3 (a): Photomicrograph showing cyst wall with foamy macrophages in the lumen (H & E, X100), (b): cyst wall with lymphoid aggregates (H & E, X40)

Discussion

Mesenteric cysts were first described in the 16th century.[1] They are one of the rarest abdominal tumors and the incidence varies from 1 per 100,000 to 250,000 admissions.[2] Among these uncommon cystic lesions of the mesentery, chylolymphatic cysts are extremely rare.[3] These cysts arise in sequestered lymphatic channels or ectopic lymphatic tissue in the small bowel mesentery and enlarge by accumulating both lymph and chyle. The accumulation of chyle and lymph is thought to result from an imbalance between the inflow and outflow of fluid across these channels.[4] The cysts may be asymptomatic or may manifest with abdominal pain, distension, lump, or intestinal obstruction.[5] Both the patients in the present series were symptomatic with abdominal pain.

The definite diagnosis of these lesions is difficult prior to surgical exploration as there are no pathognomonic symptoms or characteristic imaging findings. Abdominal radiographs are usually non contributory, however may reveal dilated bowel loops with air-fluid levels in the very rare patients with intestinal obstruction which may result from compression of the adjacent bowel by the cyst[6] or by mesenteric volvulus. The diagnosis may be suggested by an ultrasound of the abdomen, which may reveal a cystic lesion in relation to the bowel loops, away from the adjacent viscera. A fluid-fluid level has been reported as a characteristic finding of these cysts which results from an upper fluid level due to the chyle, and a lower fluid level due to the heavier lymph.[7] CT scan demonstrates the fluid attenuation of the lesion and its relationship with the adjacent viscera. A characteristic chyle-lymph fluid level has also been described.[8] However, in the present series, although the ultrasound and the CT scan were able to detect a cystic lesion in the region of the duodeno-jejunal flexure, away from the adjacent viscera, a definitive preoperative diagnosis of chylolymphatic cyst could not be made. Management of these cysts involves their removal which may or may not involve resection of the adjacent bowel. Most cysts can be enucleated (as in the 1st patient); however, in some this is not possible without sacrifice of the blood supply to the adjacent bowel and hence necessitates resection (as in the 2nd patient). Procedures like marsupialization and drainage are associated with high recurrence rates (as was in the 2nd case) and are best avoided.[9]

Histopathology of the resected specimen reveals either unilocular or multilocular cysts.[10] The cysts are usually lined with single layer of endothelium, and may contain lymphoid tissue and foam cells.[4,10]

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Segmental ileal dilatation in a child

Introduction

Segmental intestinal dilatation (SID) is an exceptional pathology with an unknown etiology and a misleading clinical presentation. It is a congenital condition in which the caliber of the bowel lumen increases locally without obstruction to the lumen and without deficient innervation.[1] Usually ileum is involved.[2] It is commonly referred as segmental dilatation and sometimes as segmental megaileum, ileal dysgenesis, or giant Meckel's diverticulum. We report here a case of an 8 year old boy with segmental dilatation of ileum associated with Meckel's diverticulum presenting with intestinal obstruction and previously operated in the newborn period for an omphalocele.

Case Report

An 8 year old boy presented with the history of pain abdomen and bilious vomiting of 12 hours duration and no passage of stool for one day. He had undergone primary closure for