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A Case of Abdominal (Mesenteric) Cystic Lymphangioma.

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ABSTRACT

A lymphangioma is a benign proliferation of lymph vessels, producing fluid-filled cysts that result from a blockage of the lymphatic system. The incidence of abdominal lymphangiomas is unknown. Cystic lymphangioma of the small bowel mesentery is a rare manifestation of an intra-abdominal tumour. It is a rare congenital malformation that presents either with chronic abdominal pain, distension (and is detected by palpation of a cystic mass) or acutely with worsening of pain, bowel obstruction or signs of peritonitis. Abdominal ultrasonography is the procedure of choice for establishing the diagnosis. Computed tomography and MRI may be useful.It is more common among boys and most often occurs in children under 5 years of age. We present the case of a 10 year old girl with a cystic lymphangioma of the jejunal mesentery.

Keywords: mesenteric, cyst, lymphangioma.

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CASE HISTORY

A 10 year old girl came with complaints of lower abdominal pain for the past 2 years which was vague in nature and present occasionally. For the past 15 days, there was an increase in the pain,more towards the right lower quadrant. She had no H/o fever/vomiting/abdominal distension/constipation. She had no h/o weightloss or loss of appetite. History regarding other systems are normal [1, 2].

Clinical Examination

Patient is moderately built and nourished, afebrile. No pallor / jaundice / cyanosis / clubbing / lymphadenopathy / pedal edema.

Per abdominal examination, there is Right iliac fossa tenderness. No mass palpable.

Other systems examined and found to be normal.

Investigations

Ultrasonography showed a large 7.8 x 7.5 cm abdominopelvic,multiloculated cystic lesion. MRI showed a large thin walled multiloculated (12 x 7x6cm) cyst in right lower abdomen and pelvis.

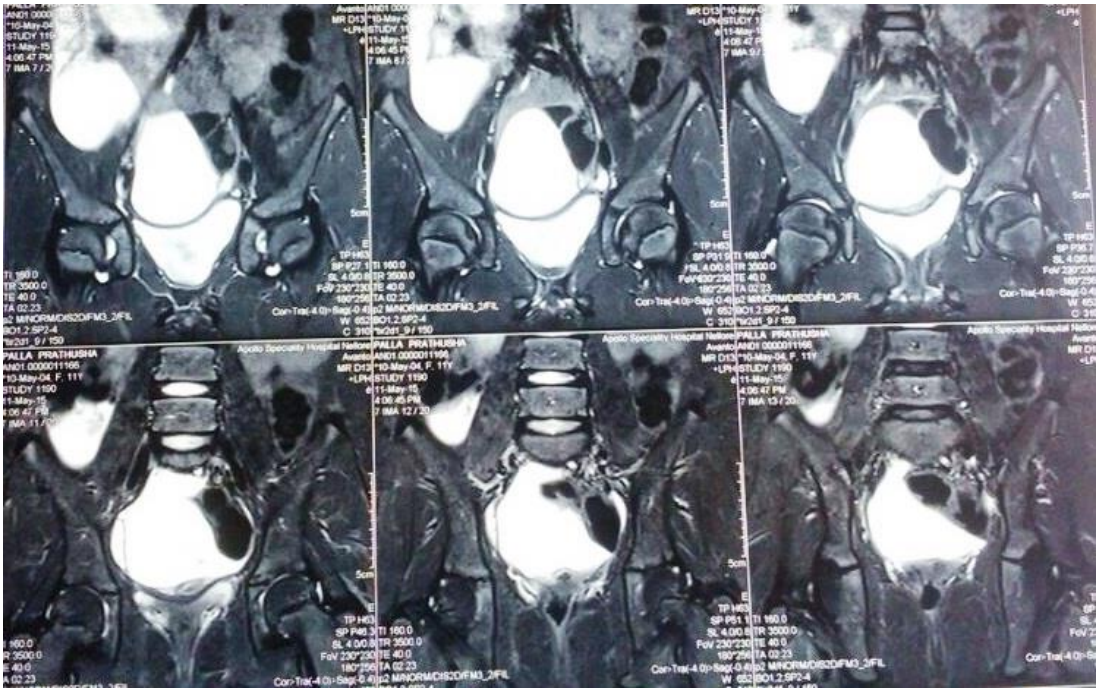

Figure 1: MRI Abdomen

Procedure

Patient was posted for exploratory laparotomy under GA.

A mesenteric cyst of size 8 x 7 cm in the jejunal mesentery, with an independent blood supply. It was not communicating or having a blood supply from the adjacent bowel.

Enucleation of the cyst was done.

Rest of the bowel & mesentery found to be normal. A drainage tube was kept.Abdomen closed in layers

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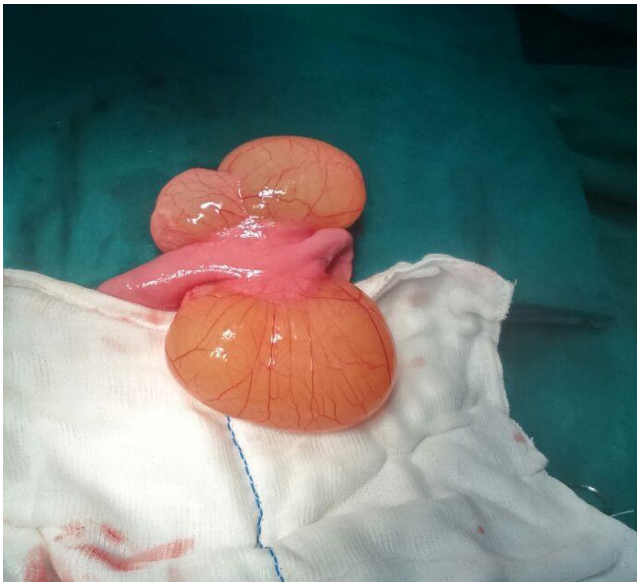

Figure 1 (a)

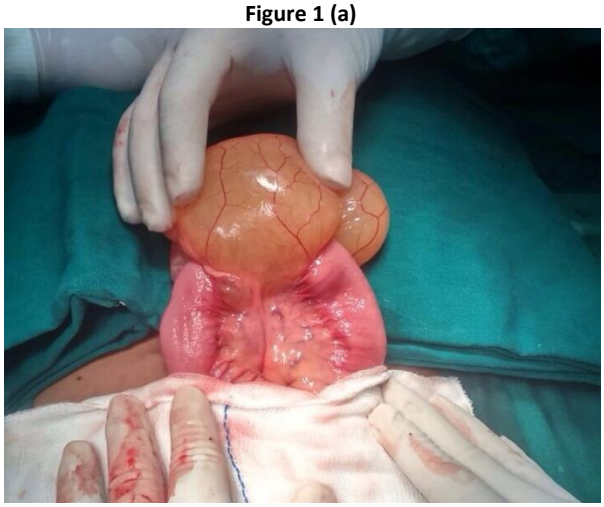

Figure 2 (b)

Figure 2 (a and b): Cyst in the jejunal mesentery

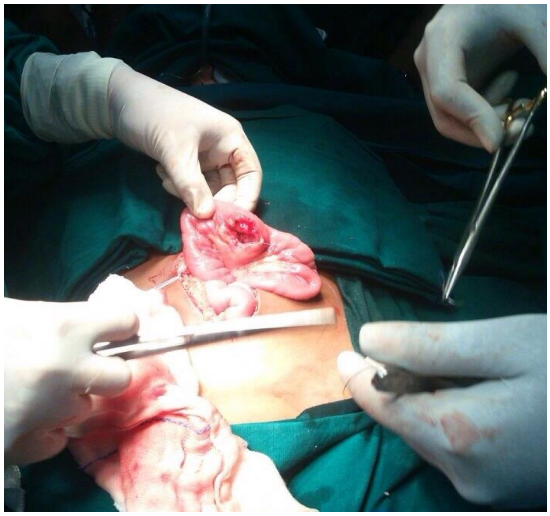

Figure 3: Enucleation

HPE report of the cyst wall came to be consistent with cystic lymphangioma.

Follow Up

Post-operatively patient recovered well and was discharged after a week. She was advised to come to OPD for check-up after a week, then after 2 weeks, after a month and then, 2 months following the last visit. She was asymptomatic and didn't have any complaints.

DISCUSSION

A lymphangioma is a benign proliferation of lymph vessels, producing fluid-filled cysts that result from a blockage of the lymphatic system. The most common sites are the head, neck and axillary lesion; intra-abdominal lymphangiomas are rare, accounting for only about 9% of all lymphangiomas [3-5]. They usually occur during childhood (<5years), more commonly in boys than girls.

The etiology of lymphangiomas remains unclear. A well-established theory suggestes that lymphangiomas arise from sequestrations of lymphatic tissue during embryologic development.However, it is suggested that abdominal trauma, lymphatic obstruction, inflammatory process, surgery or radiation therapy may lead to the secondary formation of such a tumour.

Histologically, lymphangiomas are classified into 3 types: simple capillary, cavernous and cystic lymphangiomas. The simple capillary lymphangioma is usually situated superficially in the skin and composed of small thin-walled lymphatics. The cavernous lymphangioma consists of larger lymphatics having a connection with normal adjacent lymphatics. The cystic lymphangioma consists of lymphatic spaces of various sizes that contain serous, chylous, bloody or purulent fluid, but has no connection with normal adjacent lymphatics [6].

Patients with mesenteric lymphangiomas are usually asymptomatic until the tumours enlarge. Abdominal pain, palpable mass and distention seem to be the most common symptoms, but the clinical presentation varies. The mass is usually discovered only incidentally during examination or surgery for an unrelated illness; however, some patients may have acute clinical symptoms caused by compression of the adjacent structures or by complications such as infection, perforation, torsion and rupture.

Abdominal ultrasonography is the procedure of choice for establishing the diagnosis. Acute cases with intracystic hemorrhage are more difficult to diagnose. Computed tomography and MRI are also helpul in establishing the diagnosis [2,7].

Enucleation (when feasible i.e when the cyst has got an independent blood supply, and not from the adjacent bowel loop) or segmental intestinal resection (when the cyst is intimate to the bowel or receives its blood supply from it) is effective treatment [8]. In a few cases the malformation is diffuse, and extensive bowel resection is necessary, with the risk of short bowel syndrome. The optimal treatment is radical excision, since incomplete resection may lead to recurrence. Cyst unroofing or marsupialization is not recommended,because mesenteric cysts have a high propensity to recur after drainage alone [9]. Although lymphangiomas are benign lesions, they often behave in an aggressively invasive manner and grow to an enormous size. Therefore, resection of adjacent organs may be required to accomplish complete excision. If radical surgery is not technically possible, injection of bleomycin or OK-432 into the tumour has been reported to be effective [10].

CONCLUSION

Mesenteric cystic lymphangioma is a rare manifestation of a benign intra-abdominal tumour, with an incidence of < 1 in 100,000. Presents mainly with chronic intermittent abdominal pain or non-specific symptoms such as anorexia, nausea, vomiting, and fatigue or weight loss. However, they can cause acute abdominal pain secondary to rupture, haemorrhage into the cyst,torsion or peritonitis necessitating emergency surgery.

Ultrasonography, CT or MRI are usually used for diagnosis.

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They have excellent prognosis, with symptomatic relief and cure achieved with complete surgical excision.

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