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Case Report

A case report on a rare occurrence: mesenteric cyst complicating pregnancy

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ABSTRACT

Mesenteric cysts are very rare abdominal tumours with an incidence of 1/250000 cases and a mere less than 10 cases noted in pregnancy. The etiology is attributed to the failure of communication of lymph nodes to the lymphatics. These cysts can be uni/multilocular and involve the small bowel mesentery. An 18 year old primigravida at 12 weeks of gestation was admitted with complaints of lower abdominal pain for 1 month. Ultrasound revealed the presence of loculated ascites or a mesenteric cyst. MRI abdomen revealed a large well defined cystic lesion with thick septations suggestive of a complex ovarian cyst/ mesenteric cyst. Patient was planned for laparotomy. On laparotomy, the patient had 2 large mesenteric cysts with intervening bowel. Fluid aspirate from the cyst was turbid/chylolymphatic. Laparotomy was proceeded to excision of the cyst with resection and anastomosis of the bowel. Post operatively, there were no complications noted at the site of anastomosis, an ultrasound showed a live fetus with good cardiac activity and adequate growth. She carried the fetus to term with no maternal and fetal complications and was terminated by caesarean section. A very large cyst may affect the growth of the fetus, may rupture spontaneously or may undergo torsion. The definitive treatment is enucleation with/without bowel resection. Early identification and definitive treatment is necessary for proper management of the condition.

Keywords: Mesenteric cyst, Lymphatics, Laparotomy

INTRODUCTION

Mesenteric cysts are rare abdominal tumours. The exact etiology is not known but can be attributed to the failure of communication of lymph nodes to the lymphatics / venous system as a result of trauma/infection/neoplasm.[1] These cysts can be uni/multilocular and commonly involve the small bowel mesentery.[1] Incidence is 1/250000 cases.

CASE REPORT

An 18 year old primigravida of 13 weeks gestation presented to the OPD with complaints of abdominal pain for 1 month duration, non-radiating, diffuse, dull aching pain without bowel disturbances and a USG showing features of a loculated ascites or mesenteric cyst. There was no significant past history such as trauma to the abdomen. On examination, the patient was moderately built and nourished. Abdominal examination had no palpable mass, with uterus corresponding to 12-14 weeks of gestation. On evaluation, USG-a large abdomino pelvic mass with multiple septations of size 22×19×8 cm noted. CA-125-8.8 U/ml. MRI abdomen revealed a probable diagnosis of Rt complex ovarian cyst/mesenteric cyst. CB-NAAT was negative.

Under SGE guidance the patient was taken up for laparotomy. Intra-operative findings found a uterus of 16 weeks size, B/L tubes and ovaries normal. Multiloculated cyst arising from bowel wall each of size 10×10 cm with intervening small bowel. Cyst and cyst wall excision done. 3 areas of solid components noted near the bowel wall and could not be separated hence proceeded to resection and anastomosis of small bowel of approx. 10

cm, 20 cm proximal to the ileocecal junction. All the specimens were sent for HPE. HPE report found section from the cyst showing low cuboidal epithelium with supporting fibrous tissue. Section from the intestine shows normal histology with vascular congestion. Impression was a simple mesothelial cyst. It is a congenital cyst according to Perrots classification. The patient was followed up with regular antenatal visits and she carried the fetus till term. She delivered by emergency cesarean section in view of fetal distress.

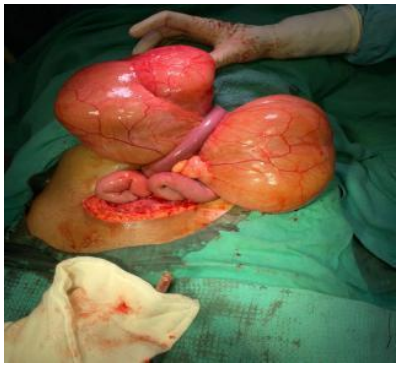

Figure 1: Bilobed mesenteric cyst with intervening small bowel loop.

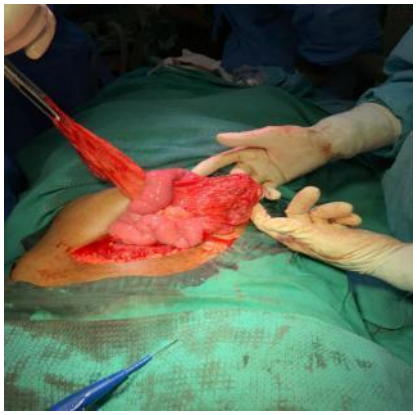

Figure 2: Cyst wall after aspiration of the mesenteric cyst.

Figure 3: Resection and anastomosis of resected bowel with the pregnant uterus.

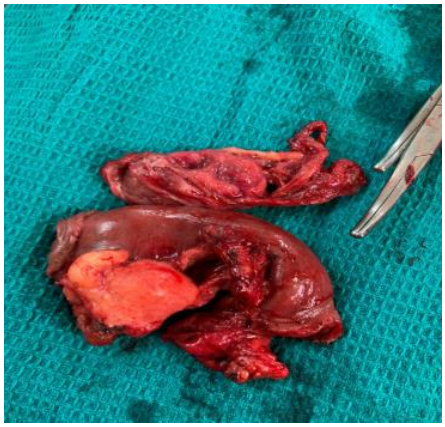

Figure 4: 10 cm of small intestine resected due to the presence of solid components at the base of the cyst.

DISCUSSION

Mesenteric cysts are cystic lesions in the mesentery occurring anywhere from the duodenum to the rectum with a female predominance. The various types include chylolymphatic, enterogenous, dermoid or an urogenital remnant cyst. 10% present as an acute emergency with intestinal obstruction.[2]

It usually consists of clear fluid or chyle and are lined by columnar/cuboidal epithelium with fibrosis.[3]

Signs and symptoms include abdominal distension, vague abdominal pain with/without a palpable mass [3] Tillaux's triad can be noted in cases of mesenteric cyst was fluctuating swelling near the umbilicus, freely mobile in the direction perpendicular to attachment of the mesentery, zone of resonance around the swelling on percussion.

On ultrasound, they can be seen as unilocular or multilocular loculations with thick or thin walled septae as heterogenic or anechoic lesion.[4]

The malignant transformation is about 3%.[1,3] The most common infective agents are S. aureus, E. coli and TB. Differential diagnosis include ovarian cyst, appendicular mass, abdominal tumor, hematocolpos, appendicular mass, pseudocyst of pancreas, loculated ascites. Perrot system is used for its classification.[4]

The complications associated are infection of the cyst, cyst rupture, malignant transformation, intestinal obstruction, fetal growth restriction, pre-term labour.

Treatment modalities include enucleation, excision and intestinal resection, partial excision with marsupialization, USG guided aspiration. Recurrence rate was 0-13%.

CONCLUSION

Mesenteric cyst is a very rare occurrence and has been reported in only 5 cases during pregnancy. A very large

cyst may affect the growth of the fetus, may rupture spontaneously or may undergo torsion. The definitive treatment is enucleation with/without bowel resection. Early identification and definitive treatment is necessary for proper management of the condition.

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