Original Research Paper

General Surgery



MUCINOUS MESENTERIC CYST OF SIGMOID MESOCOLON : A RARE ENTITY

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ABSTRACT Mesenteric cysts are rare and occur in patients of any age. They are asymptomatic and found incidentally or during the management of their complications. They commonly originate from the small bowel mesentery, although a proportion of them have been found to originate from the mesocolon (24%) and the retroperitoneum (14.5%).^[1] A mesenteric cyst originating in the sigmoid mesocolon is a very rare finding.^[23,45] They are a rare cause of abdominal pain and are discovered incidentally. If symptomatic, patients with these cysts present with abdominal pain, vomiting and low backache. Performing a thorough physical examination and conducting radiological investigations like ultrasonography (USG), computed tomography (CT) are keys in diagnosing the mesenteric cysts.

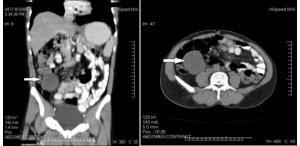
KEYWORDS:

CASE REPORT:

A 47 year old man presented with complaints of vague intermittent lower abdominal pain and low backache since 2 months. He had no history of abdominal distension, vomiting, diarrhoea, malena, mucoid or bloody stools. Bladder and bowel habits were normal. Vitals were stable and other systemic examinations were normal. On local examination, tenderness present on deep palpation in right iliac fossa. There were no abnormalities in the per-rectal examination.

INVESTIGATIONS:

- Laboratory investigations showed Hemoglobin of 10.3 grams/dl, ESR-26mm/ $l^{\,\rm st}{\rm hr.}$
- Serum glucose, liver function tests, blood urea, serum creatinine were normal.
- USG abdomen showed a hypoechoic lesion in right flank below right kidney, 8 x 5 cm.
- CECT abdomen axial and coronal sections showed a cystic lesion with thin enhancing wall showing loculations and enhancing intervening thin septae measuring 6.1 X 5.4 cm near ileocaecal junction



TREATMENT:

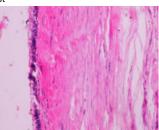
Laparotomy via lower midline incision was performed. Intraoperative findings were 8cm X 6cm mass with both solid and cystic components present in the sigmoid mesocolon close to its mesenteric border sharing a common blood supply with the segment of the sigmoid colon. The Caecum was found adherent to the mesentery of sigmoid. Small bowel mesentery and sigmoid mesentery were adherent to each other.. The cystic mass along with a part of the sigmoid colon and its mesentery was resected and intestinal continuity was restored with a colo-colic anastomosis

OUTCOME:

Post-operative recovery was uneventful,. Histopathology evaluation revealed a benign mucinous mesenteric cyst with wall of a cyst lined by tall columnar mucin secreting cells with focal collection of lymphomononuclear infiltrate in the wall.

DIFFERENTIAL DIAGNOSIS

- Lymphangioma
- Mesenteric cyst
- Retroperitoneal cyst
- Hydatid cyst



DISCUSSION:

- Mesenteric cyst is a rare cystic disease that occurs within the abdominal cavity with a prevalence rate of 1 per 1,00,000 to 2,50,000 among adult hospitalised patients [1]. They are a rare cause of abdominal pain. A mesenteric cyst in the sigmoid mesocolon is even rarer.
- The usual location of cyst is mesentery of small intestine, commonly in the mesentery of the ileum. Etiology of mesenteric cysts is variable. These usually arise from failure of lymph nodes to communicate with the lymphatics or venous system or blockage of draining lymphatics as a result of trauma, neoplasm or infection.[6]
- As most mesenteric cysts have no symptoms, they are frequently discovered by chance on USG or CT. Symptomatic patients and patients in whom radiological evaluation is inadequate to establish an accurate diagnosis form the indications for surgery.
- Surgical excision is the mainstay of treatment for both benign and malignant cysts. The surgery can be performed either by open or laparoscopic method.
- Enucleation is adequate in majority of mesenteric cysts but sometimes bowel resection may be necessary in cases where cysts are close to bowel structures or involving blood vessels that supply the bowel.[6] Mesenteric cysts have a very low recurrence rate (0-13.6%) and patients have an excellent prognosis.
- They must be considered in the differential diagnosis of a cystic lesion within the abdominal cavity.
- Complications include torsion, rupture, hemorrhage of cysts, herniation of bowel into abdominal defect and obstruction. Though most of them are benign, surgical resection needs to be considered because they have a possibility of malignant transformation

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