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A Case of Mesenterique Cyst

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Abstract **Case Report**

Mesenteric cysts are rare benign intra-abdominal tumors and have a wide range of underlying causes. The lack of characteristic clinical features and radiological signs may present great diagnostic difficulties. The cyst may present in one of three ways: non specific abdominal features; an incidental finding; or an acute abdomen. Abdominal pain is the major presenting symptom. The interest of this pathology is linked to pre-operative diagnosis and it is taking into account therapeutic load.

Keywords: Mesenteric cysts, radiological signs, Abdominal pain, symptom.

INTRODUCTION

Because of variable and non-specific clinical symptoms and signs, such as vague abdominal pain, nausea and less commonly bowel obstruction due to external compression, they are discovered either accidentally during an abdominal radiological examination for other reason or during laparotomy for the management of one of the complications. Complete surgical excision of the cyst is the treatment of choice. Knowledge of these lesions is important due to the various complications associated with suboptimal surgical management.

CASE REPORT

A 35 years old man, presents with dull aching pain on left side of abdomen of five months duration, particularly after meals patient declared no other signs. There was no family history of similar disease. On clinical examination vital parameters were found within normal limit with no pallor, icterus, pedal edema, and lymphadenopathy. Per abdomen examination revealed a giant abdominal mass, It was slightly mobile from side to side. Laboratory tests with no abnormalities, His liver function tests, basic metabolic panel, amylase and lipase levels, and urinalysis were within normal limits. Ultrasound abdomen revealed an intra-abdominal cystic mass, measuring10× 8.4 × 5.5 cm in dimension, with thick fluid of finely granular echogenicity on left side of abdomen with an enhancing peripheral rim. Therefore, patient was prepared for exploratory laparotomy and excision of cyst (Fig 1, 2, 3, 4). Patient underwent exploratory laparotomy, which revealed a big lobulated mesenteric cyst in mesentery of sigmoid, extending in mesentery of descending colon. Few epicolic and paracolic lymph nodes were slightly enlarged. Cut section revealed multi-lobulated cyst with varying wall-thickness, filled with dark brown fluid probably due to hemorrhage in the cyst. Histopathological examination showed that Cyst wall was lined by flattened benign epithelium with no granuloma or malignant feature, so opinion was consistent with clinical diagnosis of benign mesenteric cyst.

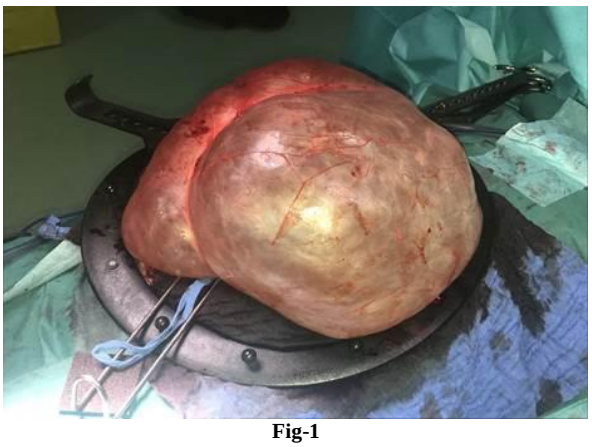

Fig-1

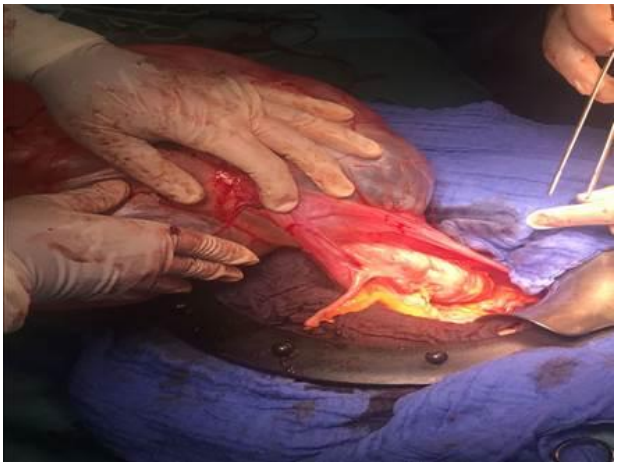

Fig-2

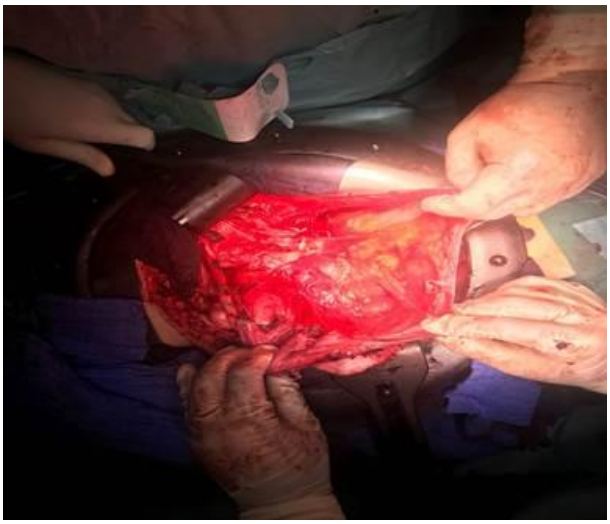

Fig-3

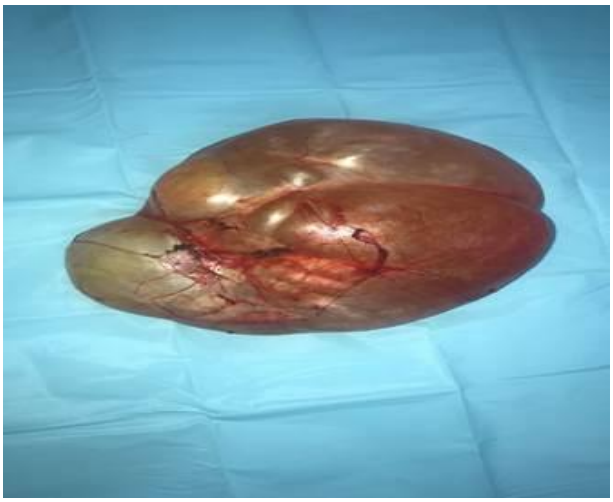

Fig-4

DISCUSSION

Mesenteric cysts are rare surgical finding. It was first described by an Italian anatomist Benevenni by performing an autopsy in an 8 years old girl in 1507, while Rokitansky published the first accurate description of a chylous mesenteric cyst in 1842 and in 1880 Tillautachived the first succesfull resection on a cystic mesenteric tumor [1]. After him, Pean reported the first marsupialization of a mesenteric cyst in 1883.

A mesenteric cyst is defined as any cyst located in the mesentery; it may or may not extend into the retroperitoneum, which has a recognizable lining of endothelium or mesothelial cell. Mesenteric cyst can occur anywhere in the mesentery of gastrointestinal tract from duodenum to rectum. In a review series of 162 patients, 60% of mesenteric cysts occurred in the small-bowel mesentery, 24% in the large-bowel mesentery, and 14.5% in the retroperitoneum while it was indefinite in 1.5% of cases [2]. Mesenteric cysts can be simple or multiple, unilocular or multilocular, and they may contain hemorrhagic, serous, chylous, or infected fluid. They can range in size from a few millimetres to few cm in diameter, however, at times may be so large that it may simulate tubercular ascites [3].

Exact etiology of mesenteric cyst has yet to be verified, but failure of the lymph nodes to communicate with the lymphatic or venous systems or blockage of the lymphatics as a result of trauma, infection, and neoplasm are said to be contributing factors [4].

Mesenteric cyst may occur in patients of any age. Approximately one-third of cases occur in children younger than 15 years. Mesenteric cysts are mostly asymptomatic and if present symptoms are quite unspecific may be found incidentally, while patients are undergoing work-up or receiving treatment for other conditions, such as appendicitis, small-bowel obstruction, or diverticulitis, although patients may present with lower abdominal pain and symptoms that are frequently associated with other abdominal conditions. The symptoms are variable and non-specific and include pain (82%), nausea and vomiting (45%), constipation (27%), and diarrhea (6%). An abdominal mass may be palpable in up to 61% of patients [5].

Mesenteric cyst should be evaluated with complete history, clinical examination and blood investigations. The size of cyst and age of patient can influence the clinical presentation [6]. In the cases of inflammatory and/or purulent complications and rupture mesenteric cysts may have a clinical presentation of peritonitis, acute abdomen and septic shock. Radiological investigations (X-ray abdomen erect, ultrasound abdomen (USG) and computed tomography (CT) scan in selected cases) US and CT of the abdomen can distinguish between solid and cystic characteristics of abdominal mass. It is rarely necessary to perform additional diagnostic procedures (NMR, fine needle aspiration and cytological analysis and explorative laparoscopy) that may help differentiate between cystic and solid tumor and further characterize the cyst. The diagnosis is proven on laparotomy and has to be histologically confirmed. Secondary complications

associated with mesenteric cysts include volvulus, spillage of infective fluid, herniation of bowel into an abdominal defect, and obstruction [7].

The treatment of choice is complete excision to avoid recurrence and possible malignant transformation. Bowel resection may be necessary in cases where cysts are close to bowel structures or involve blood vessels. Once removed, mesenteric cysts rarely recur, and patients have an excellent prognosis. Malignant cysts occur in less than 5% of cases [8].

Total cystectomy is the therapeutic Method of choice. The advent of laparoscopic surgery has allowed resection of these cysts to be achieved without full laparotomy. Laparoscopic exploration is done using four ports after insufflation with Veress needle and excision of cyst is done using cautery scissors and blunt dissection. Endobags are then used to retrieve the cyst. Laparoscopic excision allows early return of patient to his work [9-12].

CONCLUSION

Unspecific symptoms of the mesenteric cyst make it hard to diagnose, in order to confirm it, preoperatively by clinical and para clinical features such as ultrasound, CT scan... Total cystectomy is the therapeutic method of choice to avoid complications. The diagnosis is proven on laparotomy and has to be histologically confirmed.

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