



Giant Mesenteric Cyst, Presentation as Acute Appendicitis in Adult: A Rare Case Report

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ABSTRACT

Introduction - Mesenteric cysts are uncommon benign abdominal lesions with no classical clinical features. The preoperative diagnosis requires the common imaging modalities but the final diagnosis established only during surgery or histological analysis. The treatment of choice is complete surgical excision. Case report- We report a 25-year-old male with a non-specific abdominal pain and discomfort since 15 days. USG finding suggestive of large collection in right ileac fossae and pelvis. Expletory laperotomy was done and during intraoperative a large mesenteric cyst was found. The cyst was completely removed and histology report confirmed mesenteric cyst without evidence of malignancy. Conclusion- Mesenteric cyst is rare tumor that more common in children. They may be presented various clinical symptom. Mesenteric cyst best treated as resection anastomosis

Keyword: Mesenteric cyst, Large collection, Malignancy, laparotomy, Resection anastomosis

INTRODUCTION

A mesenteric cyst is a cystic mass developing in the mesentery, and it is a relatively rare disease

that is observed in one in 100,000- 250,000 hospital admissions ^[1,2]. The cause of a

mesenteric cyst is still not clear; nonetheless, obstruction of lymph ducts, injury of lymph ducts, degeneration of lymph nodes, proliferation of ectopic lymphoid tissues, failure of mesenteric leaves to fuse have been considered. As its etiology, congenital diseases, diverticula, surgery in the pelvic area, and pelvic inflammatory diseases have been cited [3,4]. It is asymptomatic in most cases and is detected incidentally by using radiological diagnostic tests. Although uncommon, complications, such as infection, hemorrhage, volvulus, perforation, and ileus, have been reported [3,5,6]. The choice of treatment is a complete surgical resection with or without bowel resection. We experienced 1 patient who developed an acute abdomen induced by infected mesenteric cysts that had developed in the mesentery of the small bowel.

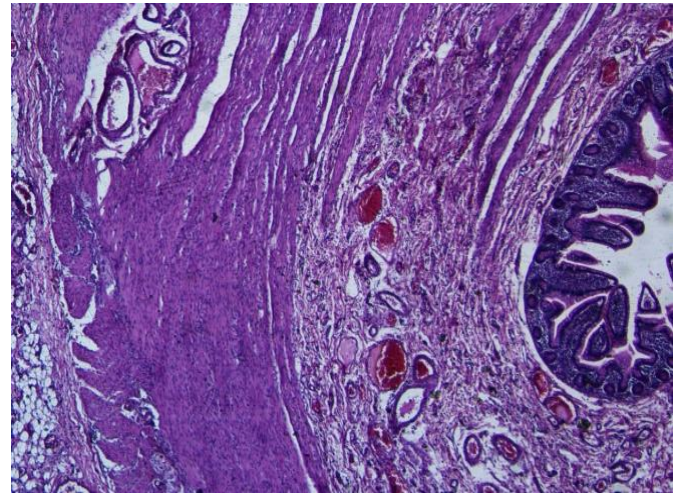
CASE REPORT

An 25-year-old male presented to the surgical clinic of PBM Hospital Bikaner with the history of dragging pain in the lower part of abdomen in right ileac fossa 4 month back. The Patient investigated and USG finding suggestive of appendicular abscess with lump formation. Patient treated conservatively. Patient discharge from hospital with advised interval appendectomy. He lost in follow up. Patient readmitted with pain in right ileac fossa since 15 day. The patient also have fever last 5 day, with sign of intestinal obstruction. He denied any history of trauma or previous abdominal surgery. The patient had

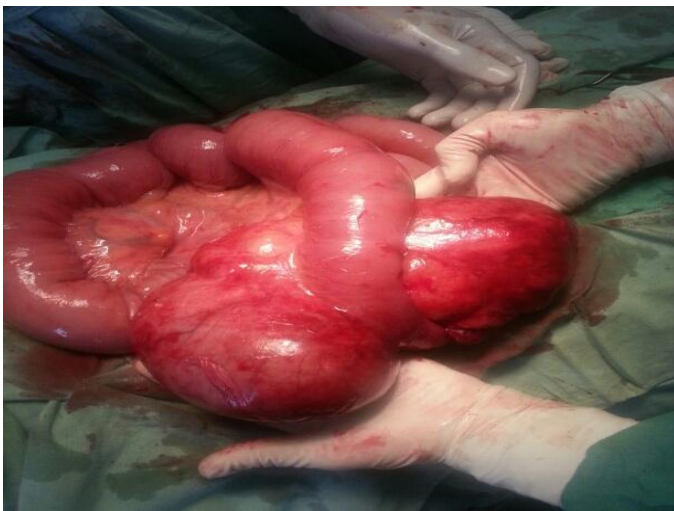
tachycardia Pulse 110/minute, BP 116/76 mm of Hg. Her abdominal examination demonstrated slight distension with acystic and mass measuring 10x12 cm in the in right ileac fossa region. Bowel sounds were audible with exagraded frequency. In investigations, TLC counts raised, 18000 cu/mm and RFT, LFT in normal limits and chest x-ray was normal. Ultrasonography of abdomen and pelvis suggestive of lump in right ileac fossa and large collection measuring 15x12 cm in right ileac fossa and 10x12 cm in pelvis with intervening septation no visualisation of appendix. Abdominal drain inserted in right ileac fossa in local anaesthesia. but patient condition not improved. The patient plan for exploratory laparotomy. Intraoperative a large mesenteric cyst originating from small bowel mesentery, occupying in right ileac fossa and pelvis (figure 1,2) with proximal small bowel loop dilated. Resection and anastomosis done along with removed of mesenteric cyst which was not found to be infiltrating the surrounding structures (Figure-3) Layered closure of the abdomen was done after the placement of a suction drain. The patient made uneventful recovery and was discharged home on 9th postoperative day. The histological report showed cystic wall composed of fibrocollagenous and adipose tissue with chronic inflammatory cell neutrophils and eosinophils. Intestinal surface is devoid of lining epithelium. It is made up of acute inflammatory cell consisted with mesenteric cyst lined by columnar epithelial cells (figure 4,5,6).



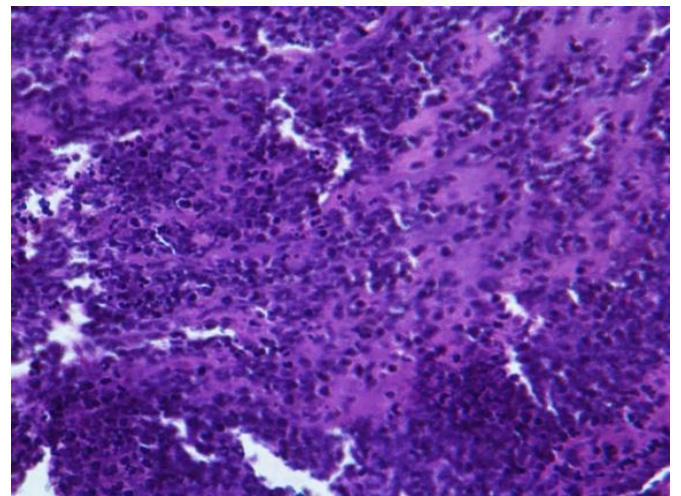
[Figure-1] Mesenteric cyst



[Figure-4] Mesenteric cyst(normal intestine10x H&E)



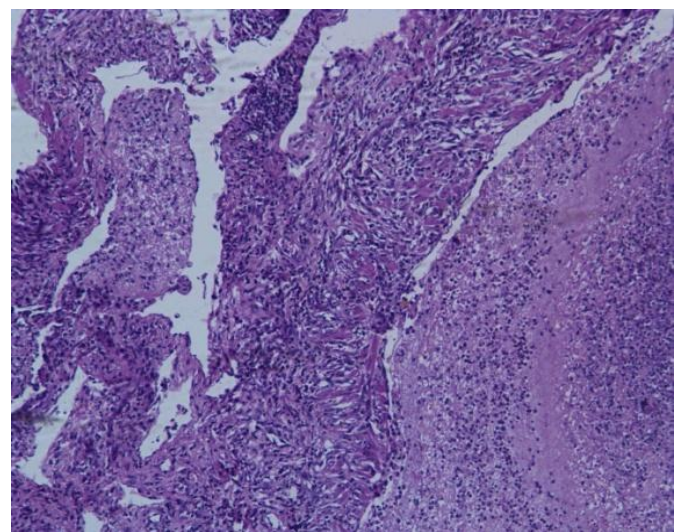
[Figure-2] Mesenteric cyst



[Figure-5] Mesenteric cyst with infiltration of chronic inflamatory cell 40x H&E



[Figure-3] Mesenteric cyst



[Figure-6] Mesenteric cyst with infiltration of chronic inflamatory cell 10x H&E

DISCUSSION

Majority of mesenteric cysts are congenital, but may be related to previous abdominal surgery, pelvic diseases, and trauma [7,8]. The most common presentation is no specific abdominal pain (55-82%), followed by the complaint of abdominal mass (54-61%), and abdominal distension [9,10,11] (17-61%). Physical examination is often unremarkable but reveals a mass in 66.8% of cases¹² while the average duration of symptoms are 2-6 months (range; 12 h to 12 months)[12]. Viola et al. hypothesized that mesenteric cystic lymphangioma is an acquired anomaly due to chronic intermittent volvulus [13]. The most widely accepted classification was coined by Beahrs et al. in 1955[14].¹⁶ According to this classification, there are four types of mesenteric cysts; developmental, traumatic, infective, and neoplastic. The malignant cystic mesothelioma is the only mesenteric cystic tumor that carries malignant potential and has tendency to recur after surgical excision[15]. Diagnosis is established via one of three routes: Firstly, patients may be asymptomatic and the disease is discovered coincidentally on imaging or intra-operatively. Secondly, patients may present with non-specific symptoms prompting investigation or thirdly, approximately one third of patients develops complications and present acutely as in our case. Complications include bowel obstruction volvulus, hemorrhage, infection and rupture. Rupture of a spontaneously infected mesenteric cyst is extremely rare. Mesenteric cysts have been classified based on their histopathological findings [16], the first type consisting of cysts of lymphatic

origin also known as lymphangioma, It has been suggested that ectopic lymphatic tissue or blocked lymphatic channels may be the causative developmental abnormality. The mechanism that such can infect a cyst is unclear. The histopathology in this case did however reveal patent lymphatic channels extending to the bowel wall and therefore lymphangitis with infection from bowel organisms would seem a plausible explanation.

CONCLUSIONS

The high mortality in the treatment of this condition is due to the late recognition of the disease, usually during an emergency operation, at which time the serious complications of intestinal obstruction and peritonitis have already developed. Under such circumstances, resection of the bowel naturally carries with it a very high primary mortality. These tumors are sufficiently common to justify consideration of the condition whenever an abdominal tumor is observed. The symptoms and signs are not characteristic and the diagnosis must be made by the exclusion of the more common tumors met with in the abdomen.

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