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Original Research Paper

General Surgery

A RARE CASE OF RUPTURED OMENTAL CYST MIMICKING AS A GROWTH IN TRANSVERSE COLON – A CASE REPORT

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ABSTRACT Omental cysts are rare intra-abdominal tumors. Omental cysts are usually asymptomatic and are incidentally detected during physical or radiological examination. Although uncommon, complications such as infection, bleeding, torsion, rupture and intestinal obstruction cause an acute abdomen. Spontaneous rupture is a very rare complication. We present **a case of ruptured omental cyst adherent to the transverse colon** , which caused an acute abdomen. A 62-year-old woman was admitted to our hospital with acute abdominal pain. She had a painful mass in the right abdomen on physical examination. Abdominal computed tomography showed a hypodense mass noted in right upper and lower quadrants. Laparotomy revealed a cyst in the omentum attached to transverse colon and resection of the cyst was done.

KEYWORDS :

INTRODUCTION

An omental cyst is a cystic mass developing in the omentum, and it is a relatively rare disease that is observed in one in 100,000-250,000 hospital admissions . The cause of a omental cyst is still not clear; nonetheless, obstruction of lymph ducts, injury of lymph ducts, degeneration of lymph nodes, proliferation of ectopic lymphoid tissues, may be there . 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 . 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 ruptured omental cysts that had developed adherent to the transverse colon near its attachment.

PRESENTATION OF CASE

The patient was a 62-year-old female who was admitted for severe abdominal pain that had developed 2 days prior . Patient had a vague history of blunt injury to abdomen before 2 days .Patient had history of constipation and history of obstipation for 3 days she was a newly diagnosed diabetic and had no other co morbidities. At the time of admission, her blood pressure was 130/70 mmHg, her pulse was 112 times/min and her respiration rate was 24 times/min. On physical examination, a mass of size 8cmx6cm was palpable in the right lumbar region , tenderness and guarding was present in the right upper quadrant and right lumbar regions of her abdomen. On the peripheral blood test, hemoglobin was 11.7 g/dL, hematocrit was 33.9%, the number of leukocytes was 12,600/mm^3, and the number of platelets was $217 \times 10^3/mm^3$.

On the plain abdominal X-ray, no findings of mechanical bowel obstruction were observed. In computed tomography a heterogeneous soft tissue density lesion with cystic components in right iliac fossa and right lumbar regions with perilesional fat stranding.

Emergency laparotomy was done which revealed a large thick walled ruptured omental cyst of size 8cmx7 cm which was adherent to the transverse colon near the hepatic flexure. Adhesions were released cyst was resected and omentecetomy done . Rest of the laparotomy was uneventful except for a small simple cyst in the left ovary as well

Figure 1

Figure 2

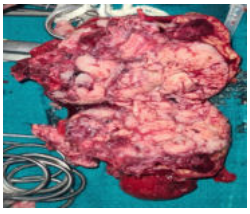

Figure 3

On gross specimen examination: cyst with nodular surface with serous fluid filled in it.

The histopathological findings in the cyst revealed fibrofatty tissue with cells arranged in complex hierarchial branching fashion with smooth muscle fibers and lyphoid cells,features suggestive of lymphangioma.

Patient blood investigations for AFP(alpha feto protein),CEA (carcinoembryonic antigen) and CA 125 were normal.

Post operative period was uneventful and the patient was discharged.

DISCUSSION

Omental cysts have been reported to be relatively rare, occurring more frequently in females than in males and being detected in all age groups, with the 40-70 age group having a higher incidence .Omental cysts are classified according to their etiology and histological characteristics as 1) fetal and developmental cysts, 2) traumatic or acquired cysts, 3) neoplastic cysts, and 4) infectious or degenerative cysts . Among them, fetal and developmental cysts, as well as neoplastic cysts, are true cysts that are formed by endothelial cells. Traumatic cysts and infectious and degenerative cysts are classified as false cysts that are lined with a fibrous cystic wall with inflammatory cells.

The sizes of Omental cyst are diverse. Most cysts are

asymptomatic and thus are discovered incidentally during imaging diagnostic tests or surgery. Abdominal symptoms caused by cysts, such as abdominal pain (55-82%), palpable abdominal lumps (44-61%), and abdominal distention (17-61%), may be observed. Patients who develop infection, hemorrhage, volvulus, perforation, or bowl obstruction may show an acute abdomen . Symptoms associated with mesenteric cysts are primarily shown in patients with cysts whose diameters are larger than 5 cm.

The inner wall of a omental cyst has been reported to be composed primarily of columnar or cubic endothelial cells, hence are usually serous type of tumors but are usually benign and malignancy is relatively rare. Malignancies are more common in elderly populations like in our patient a 62 year old female.

The choice of treatment for omental cysts is complete surgical resection with or without bowel resection . For cases in which the size of cyst is big and, thus, the resection area becomes broad, short bowel syndrome is anticipated, so simple aspiration or marsupialization may be considered, but generally are not recommended because of frequent recurrence and infection . Omental cysts are detected incidentally by using imaging diagnostic tests or during surgery in many cases, but they may cause infection, hemorrhage, volvulus, perforation, bowel obstruction and even fatal complications in some cases. Hence, when a mesenteric cyst is detected, resection should be considered.

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