

CASE REPORT

A RARE CASE OF MASSIVE OMENTAL CYST MIMICKING AS AN OVARIAN CYST

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ABSTRACT: A 15 yr old girl presented with distension of abdomen & anorexia of 6months duration. On examination there was massive distension of abdomen, and a vague cystic mass with fluid thrill. A diagnosis of ascites / ovarian mass was made. Ultra sound scan abdomen revealed a well encapsulated large cystic mass with bowel loops around. With a possibility of ovarian cyst, laparotomy was done after improving the general condition of the patient, which revealed a massive cyst in between the two leaves of greater omentum, extending from greater curvature of stomach up to the pelvic brim. Excision of the cyst was done. Post-operative period was uneventful.

KEYWORDS: Massive abdominal distension, omental cyst, ovarian cyst.

INTRODUCTION: Omental cysts are rare to occur. Most of them are developmental anomalies due to sequestration of the lymphatics within the omentum. They are very rare to be diagnosed preoperatively, often mistaken for an ovarian cyst or an enterogenous cyst. Occasionally they present with complications like haemorrhage, rupture, infection with symptoms of acute abdomen. Hence once suspected, they need immediate intervention.

Clinical symptoms, diagnosis, complications and treatment of omental cysts are discussed here.

CASE REPORT: A 15 year old girl presented to our OPD with a complaint of abdominal distension and postprandial discomfort. There was no history of any fever, vomiting or cough and expectoration. She attained menarche 1 year ago and having normal cycles.

On examination she was anemic, ill built and malnourished. Her secondary sexual characters and external genitalia were normal. There was massive distension of abdomen, dull on percussion throughout and with fluid thrill. Heart and lungs were normal. Left supraclavicular fossa was free of any lymphadenopathy. A clinical diagnosis of ascites /ovarian cyst was made and patient was evaluated.

Ultrasound scan abdomen revealed a huge multiloculated cyst occupying upper and lower quadrants of abdomen. The contents were anechoic in nature. Rest of the viscera was normal. A possibility of massive ovarian cyst/mesenteric cyst was thought of. CA125 was found to be within normal limits. Liver function tests were normal Laparotomy was planned after assessing the fitness of patient.

A midline supra and sub umbilical incision was given. There was massive thin walled cyst just underneath the parietes occupying the epigastrium, right and left lumbar, umbilical and hypo gastric regions. The origin of cyst was found to be from the two leaves of greater omentum. The superior boarder of the cyst was greater curvature of stomach and the inferior boarder was at

CASE REPORT

symphysis pubis. The small bowel loops were lying in the pelvis. Excision of cyst was done by detaching the 2 leaves of greater omentum from greater curvature of stomach from gastro duodenal junction to about 7cm from fundus of stomach. The cyst was 22cmx15cm and of 3.5 kg in weight.

Post-operative period was uneventful and patient was discharged on 8th post-operative day after suture removal

Histopathological examination revealed flattened endothelium with lymphoid tissue and increased vascularity with no evidence of malignancy

DISCUSSION: The greater and lesser omenta are complex peritoneal folds that arise from the dorsal and ventral midline mesenteries of embryonic gut. The embryonic dorsal mesogastrium grows as a sheet of peritoneum extending from the greater curvature of stomach over the anterior surface of small intestine. After passing almost to pelvis, the peritoneal membrane turns up on itself to pass upward to a line on transverse colon slightly above that of transverse mesocolon.^[1] Jejunum and ileum are supported by the peritoneum covered dorsal mesentery along with the blood vessels and lymphatics.

The omentum and intestinal mesentery are rich in lymphatics and blood vessels and stick to areas of inflammation in the abdomen and wall off the inflammatory focus from the rest of the viscera.^[1]

Omental or mesenteric cysts are due to sequestration of lymphatics within the mesentery, which fail to join the venous system, akin to cystic hygroma of the neck, in association with jugular lymphsacs. They may be due to benign lymphatic proliferation with obstruction. Rarely, they may be due to trauma or neoplasia. They are lined by lymphatic endothelium and grow into unilocular or multilocular cysts.

Omental cysts are confined to leaves of greater and lesser omentum. They are rare in incidence and occur in 1 in 140000 populations.

Mesenteric cysts are 4times more common than omental cysts.^[2] They occur anywhere from duodenum to rectum, but are more commonly found in ileal mesentery and sigmoid mesentery^[3]

Omental cysts are rarely diagnosed preoperatively and most often recognized on table.

Omental cysts are more common in children below 15 years of age with mean age of occurrence at 4.9 years, but rarely may occur in adults.^[2, 4, 5] In our case it occurred in a 15 year old girl. The first omental cyst is reported by Gairdner in 1852.^[6] Usually they are asymptomatic and present as distension of abdomen. The cysts silently grow massively in the abdomen.^[7] Sometimes complications like infection, hemorrhage, torsion, rupture and intestinal obstruction can occur and present as acute abdomen with life threatening condition.^[8] Hence, once recognized they must be operated upon immediately. Omental cysts turning malignant in children are not reported. Rarely mesenteric cysts may turn malignant into.^[8]

Clinically they should be differentiated from other causes of massive distension of abdomen such as massive ascites, massive ovarian cysts.

The omental cysts are anechoic on ultrasound and CT abdomen, uni / multilocular, with thin capsule. Chylolymphatic mesenteric cysts may be echogenic.

CASE REPORT

Non pancreatic pseudocysts do not have specific capsule and are echogenic due to debris within.^[9]

Omental cysts can be enucleated from the leaves of omentum without damaging the adjacent stomach or transverse colon.^[8]

Mesenteric cysts often can be shelled out from leaves of mesentery but sometimes need resection of bowel if vascularity of bowel is compromised.^[10]

Ovarian cysts in children and adolescents may be functional, benign or malignant neoplasms. Functional cysts are due to gonadotrophin secretion. Germ cell tumors are more common in children while epithelial cell tumors are more common in adults. Functional germ cell tumors may produce precocious puberty and virilisation^[11]

CONCLUSION: Omental cysts are rare in occurrence and often recognized on table. They present as silent massive distension of abdomen in children below 15 years of age. Rarely life threatening complications like hemorrhage, torsion and intestinal obstruction can occur. Here we are reporting a case of massive omental cyst presenting in a 15 year old girl. This case is being reported for its rarity.

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CASE REPORT

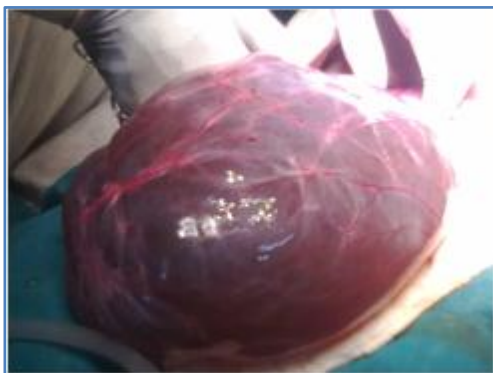


Fig 1: Large omental cyst mimicking an ovarian cyst delivered out at laparotomy



Fig. 2: omental cyst within the leaves of greater omentum



Fig. 3: Thin walled cyst with clear fluid within



Fig. 4: Omental cyst being separated from omental leaves



Fig. 5: Bed of cyst showing normal viscera

CASE REPORT

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