

Laparoscopic Management of Cystic Lymphangioma of Gastrohepatic Ligament Presenting As Chronic Abdominal Pain in A Middle Aged Gentleman-A Case Report.

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Abstract: Lymphangiomas are developmental anomalies of lymphatics, usually seen in pediatric population in head and neck region and rarely in the abdomen.

Case report: We report the case of a 45 year old gentleman presenting with chronic upper abdominal pain with contrast enhanced CT abdomen showing a cystic lesion in gastrohepatic ligament. Patient underwent laparoscopic excision of the cyst, which was proven to be a lymphatic cyst on histopathology.

Key words: gastrohepatic, laparoscopic, lymphangiomas

I. Introduction

Lymphangiomas are benign lesions formed due to abnormality of the lymphatic system. Three theories have been proposed to explain their origin. The first suggests that an arrest of normal growth of the primitive lymphatic channels occurs during embryogenesis, the second theory states that the primitive lymphatic sac does not reach the venous system, while the third hypothesizes that, during embryogenesis, lymphatic tissue gets laid in the wrong area (1). Lymphangiomas are classified as microcystic (capillary), macrocystic (cavernous) and cystic hygromas according to the size of the lymphatic cavities incorporated (2). The most common sites are the head, neck and axilla; intra-abdominal lymphangiomas are uncommon, accounting for only about 9% of all lymphangiomas (3).

Case Report

We report the case of a 45 year old gentleman who came to our OPD with complaints of vague upper abdominal pain of dull-aching type since 6-8 months, unrelated to meals, non-radiating and without any aggravating or relieving factors. He gave no history of nausea, early satiety, weight loss or any addictions. Clinical examination was unremarkable. A Contrast enhanced CT scan of the abdomen was done, which showed a large cystic lesion about 6 x 6 cm in the area of gastro-hepatic ligament, free from left lobe of liver (Fig 1). In view of symptoms and large size of the cyst, patient was undertaken for surgery. 10 mm trocar was introduced through umbilicus by open technique, 2 x 5 mm workings ports placed in left and right midclavicular lines below the costal margin, a third 5 mm port placed at left flank for retracting the stomach. Lobulated cyst with clear fluid was identified and found to be arising from the gastro-hepatic ligament, free from lesser curve and left lobe of liver, extending superiorly upto left hemi-diaphragm (Fig 2,3) It was dissected using Ultrasonic energy device, isolated, fluid aspirated and placed into a bag for retrieval through 10 mm umbilical port. Operative time was about 45 minutes and blood loss negligible. Cyst was sent for histopathology which revealed a multicystic lesion composed of intact and collapsed cystic spaces focally lined by flattened epithelium, the fibrous cystic wall showing reactive lymphoid aggregates suggestive of a cystic lymphangioma (Image). Post-operatively patient was started on liquids on day 1 and discharged on soft diet on day 2. On follow up after 1 year, patient has been asymptomatic.

II. Discussion

Cystic lymphangiomas usually present as head and neck masses in pediatric population and their intra-abdominal location is seen in only about 2-8% cases (4). There have been few case reports of their location in gastro-hepatic ligament in literature (5). The clinical features of intra-abdominal lymphangiomas are diverse, ranging from an asymptomatic tumour to acute abdomen. Therefore, these masses may be discovered incidentally during examination of an unrelated illness (6). The appearance of abdominal lymphangioma on ultrasound is often described as a cystic mass with multiple thin septa. On CT scans, they appear as uni- or multilocular masses containing septa of variable thickness with enhancement of their walls by contrast medium

(6). Although lymphangiomas are benign tumours, they often behave aggressively and grow to enormous sizes. Hence, resection of adjacent organs may be required to achieve complete excision and prevent recurrence. If radical surgery is not feasible, injection of bleomycin or OK-432 into the tumour has been reported to be effective (3). Abdominal cystic lymphangiomas can be managed laparoscopically and few such cases have been reported in the past (7, 8). Advantages include short hospital stay, reduced postoperative pain and minimal scarring. Hence it should be considered as the treatment of choice for abdominal cystic lymphangiomas.

FIGURES

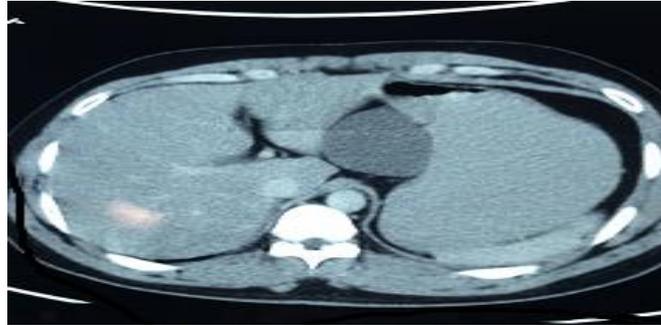


Fig 1 Contrast CT image showing cystic lesion along lesser curvature of stomach and left lobe of liver.



Fig 2. Intra-operative appearance of cyst



Fig 3. Cyst free from lesser curve of stomach

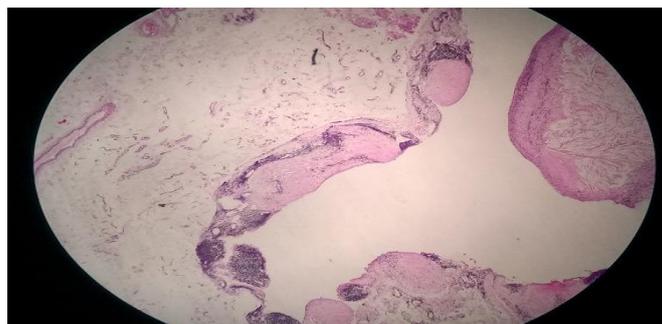


Fig 4 Histopathology slide showing cystic wall with lymphoid aggregates

III. Conclusion

Laparoscopic excision is a feasible and safe approach for the management of abdominal cystic lymphangiomas.

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