International Journal of Research in Medical Sciences
Deolekar S et al. Int J Res Med Sci. 2017 Oct;5(10):4626-4628
www.msjonline.org
pISSN 2320-6071 | eISSN 2320-6012

DOI: http://dx.doi.org/10.18203/2320-6012.ijrms20174608

Case Report

Giant haemorrhagic retroperitoneal mesothelial cyst: a rare case report

Sandesh Deolekar, Bibekananda Mahapatra, Sridevi Murali*, Karna Chheda, Naseem Khan, Sheena Ali Khan

Department of General Surgery, D Y Patil School of Medicine, Navi Mumbai, Maharashtra, India

Received: 21 July 2017
Accepted: 21 August 2017

***Correspondence:**
Dr. Sridevi Murali,
E-mail: sridevimuralisg@yahoo.co.in

ABSTRACT

A peritoneal cystic mesothelioma is a very rare mesenteric cyst of mesothelial origin. The size of this lesion usually ranges between a few centimetres and 10 cm. It is usually asymptomatic, but occasionally presents with various, non-specific symptoms. We present a 24-years-old woman with vague abdominal discomfort and associated distension for 6 months, with generalized weakness with no significant past medical history. This is an unusual case of a giant peritoneal mesothelioma which is hemorrhagic nature which could be the first such case reported.

Keywords: Haemorrhagic, Mesothelial cyst, Retro peritoneum

INTRODUCTION

Cystic peritoneal mesothelioma is a benign rare tumour, of mesothelial origin. These tumours arise from the pelvis but retro peritoneum is a rare location, they are usually asymptomatic that occurs mostly in women in their reproductive age.[1] We would like to report this unusual case of a large retroperitoneal haemorrhagic mesothelial cyst that we believe that the haemorrhagic nature could be the first such case reported in literature so far.

CASE REPORT

A 24-years-old woman with vague abdominal discomfort and associated distension, during the previous 6 months, with generalized weakness was admitted to our hospital. Her past medical history was unremarkable. Patient had no risk factors including occupational (asbestos, cadmium), family history, social (alcohol, smoking) or history of trauma. On physical examination, the patient appeared to be pale. Mildly tender and relatively tense cystic abdominal mass was palpated. The laboratory examinations were suggestive of anaemia with a haemoglobin level of 5.4g/dl and total red blood cell count 1.7 10^6/ul on admission. An abdominal radiograph showed a normal intestinal gas pattern.

Abdominal computed tomography showed a large well-defined lesion noted in the retro peritoneum on the left side extending from the left hypochondrium to left iliac region. Multiple hyper dense areas noted within the lesion, showing no enhancement on post contrast study. Anteriorly, the lesion was compressing the transverse colon, stomach and small bowel loops towards right and was abutting the anterior abdominal wall with no intraluminal extension noted. Posteriorly, the lesion was abutting and displacing the abdominal aorta to the right side of the midline and was abutting the psoas muscle to the left.

Superiorly the lesion was abutting and displacing the body and tail of pancreas and spleen upwards and is seen abutting the stomach. It was also displacing the splenic vein upwards. However, there was no intravascular extension or thrombus noted. Laterally, the lesion was abutting the spleen and displacing it poster superiorly and abutting the lateral wall of the abdomen. The kidney was horizontally rotated by the lesion with resultant mild

hydro nephrosis. The patient was stabilized and surgical intervention was decided.

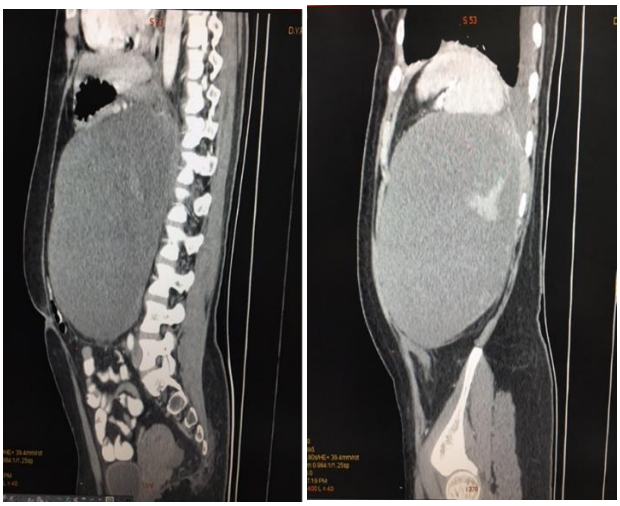

Figure 1: Abdominal computed tomography showed a large well-defined lesion.

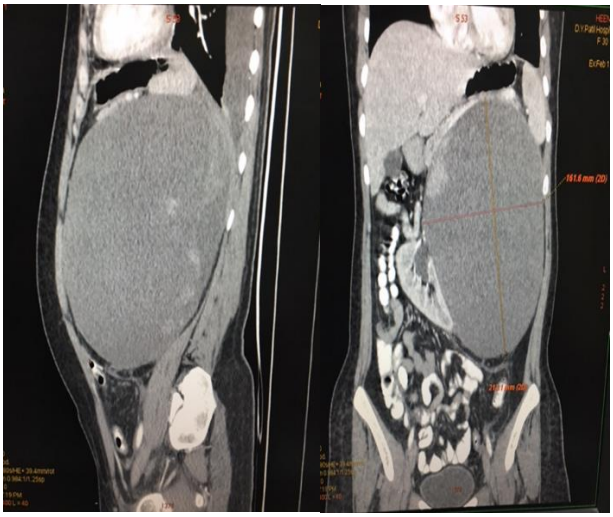

Figure 2: Abdominal computed tomography showed dimensions of large well-defined lesion.

Midline laparotomy revealed a giant abdominopelvic cyst associated with the left kidney. The cyst was thin walled and 16*21 cms consistent with the computed tomography findings. Macroscopically the mass was multilocular and contained approximately 3.5 liters of blood and clots which was opened and evacuated.

As the cyst was thin walled yet parts of the cyst were densely adherent to the retro peritoneum spleen and left kidney, a subtotal excision of the cyst was performed without any damage to the adjacent abdominal organs. The histopathological diagnosis was simple mesothelial cyst showing no atypia and no mitosis with any sensitivity to ER (estrogen receptors) and PR (progesterone receptors). The post-operative the patient presented with a seroma of 200ml retroperitoneally which was aspirated. The seroma slowly resolved on regular follow up. Three months after surgery she remains completely asymptomatic.

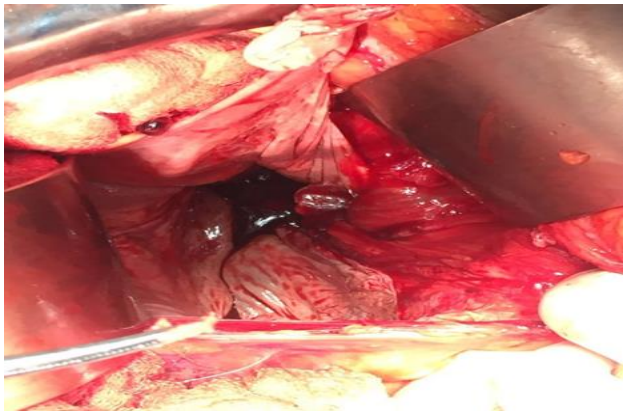

Figure 3: Intra-operative image- showing blood clots present inside the cyst.

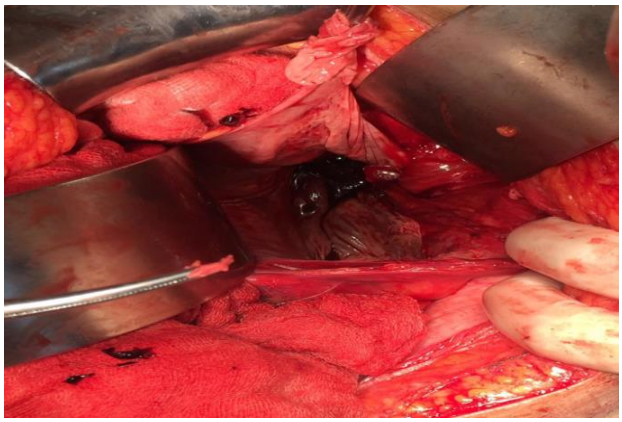

Figure 4: Intra-operative image- showing the depth of the cyst.

DISCUSSION

Benign mesotheliomas that are cystic in nature are rare neoplasms that are of mesothelial origin found along the serous lining of the pleural, pericardial, or peritoneal space. These neoplasms usually occur in the surfaces of the pelvic viscera but may occur in the retro peritoneum (retroperitoneal cystic masses by itself are a rare occurrence).[2] Cystic mesothelioma is not related to prior asbestos exposure, but the aetiology remains unclear, unlike malignant mesothelioma[2,3] There have been rare reports of transformation to low-grade malignant mesothelioma, but it is generally classified as a benign process.

The patient commonly presents with features of a massive lesion with abdominal pain, fullness, distension, and intestinal obstruction, and sometimes, weight gain. Physical examination may show abdominal tenderness, distension, or a palpable mass. Radiological imaging such as ultrasonography (US), computed tomography (CT), or

magnetic resonance imaging (MRI) are useful in assessing the location of the mass and its relation to nearby organs, which helps to determine if resection can be done, and clues to cystic contents. Surgery is the only effective treatment.[3] We had chosen an exploratory laparotomy as there was no clear diagnosis on imaging.

There are a vast number of differential diagnoses possible, including bronchogenic cyst, cystic changes in a solid neoplasm, pseudo myxoma retroperitonei, perianal mucinous carcinoma, pancreatic pseudo cyst, lymphocele, urinoma, mullerian cyst, epidermoid cyst, tailgut cyst, and hematoma, cyst adenoma of mesonephric origin cystic lymphangioma, mucinous cystadenoma, cystic teratoma, cystic mesothelioma, and cavernous Haemangioma. It is difficult to reach a precise pre-operative diagnosis owing to the similar presentation off the patients and radiological findings. Pathologic analysis demonstrates a unilocular or multilocular thin walled cyst containing watery secretions. [2,3]

In study case, there was up to 3.5 liters of blood and clots present as cystic contents, thus explaining the patient's anaemic presentation with no prior history of trauma. The rarity of the contents of the cyst as well as the retroperitoneal location of the cyst itself makes this an unusual presentation of the case. Since, benign retroperitoneal mesothelial cysts are rare, there are no established follow-up or post-operative imaging protocols to follow.

Hence, follow-up is advised, especially if complete enucleation could not be accomplished. It is recommended that a CT scan/ultrasonography should be done on follow-up at least yearly for 5 years, and we are performing this every 3 months for first year and then yearly due to intra-operative spillage.

CONCLUSION

Cysts arising within the retro peritoneum outside the major organs within that compartment are very rare, especially that of haemorrhagic nature. Most of the patients with retroperitoneal cysts are asymptomatic and the cyst is found incidentally. CT may help diagnose these lesions, but surgical excision and histopathology remains the keystone in determining the diagnosis. Finally, a prolonged systematic follow-up of these patients, perhaps for life, is required. Since the lesion usually reappears and further resection or another therapy may be indicated.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

REFERENCES

1. H. L. Kindler, "Peritoneal mesothelioma: the site of origin matters," in American Society of Clinical Oncology Educational Book; 2013:182-188.
2. Yang D, Jung D, Kim H, Kang H, Kim S, Kim J, et al. Retroperitoneal cystic masses: CT, Clinical and Pathological Findings and Literature Review. RG. 2004,25(5):1353-65.
3. Gonzalez-Moreno S, Yan H, Alcorn KW, Sugarbaker PH. Malignant transformation of 'benign' cystic mesothelioma of the peritoneum. J Surg Oncol. 2002;79(4): 243-51.

Cite this article as: Deolekar S, Mahapatra B, Murali S, Chheda K, Khan N, Khan SA. Morphometric features of asterion in adult human skulls. Int J Res Med Sci 2017;5:4626-8.