Idiopathic retroperitoneal cyst in an adult male

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Abstract

Retroperitoneal cysts are not common. Primary retroperitoneal cysts are essentially benign in nature. Mostly, they are detected incidentally. At times, they may attain a huge size and may present with large abdominal lump. In our case, a 55-year-old man had a left-sided large idiopathic retroperitoneal cyst, for which complete curative excision was performed.

Keywords: Benign retroperitoneal cyst, idiopathic cyst, primary cyst, retroperitoneal cyst

INTRODUCTION

The retroperitoneal cysts are relatively uncommon entity and their estimated rate of occurrence ranges from 1/5750 to 1/250,000.[3] In most of the cases, these cysts are found incidentally. However, in some cases, they may attain a significant size without any other associated symptoms. We herein describe a case of large left-sided retroperitoneal cyst in an adult male, for which complete excision was performed.

CASE REPORT

A 55-year-old man was admitted with a left-sided abdominal lump for the last 6 months. There was approximately 23 cm × 15 cm lump occupying mainly in the left lumbar region and extending to the left hypochondrium, left iliac fossa, and into the umbilical region. It was bimanually palpable, and fingers could be insinuated between the lump and the costal margin. There were no associated symptoms. Ultrasonography abdomen showed large unilocular cystic lesion in the left abdomen with left-sided mild hydronephrosis. For better delineation of this lesion, contrast-enhanced computed tomography (CT) abdomen was performed which revealed a large thin-walled cystic lesion measuring 23 cm × 11.3 cm × 14.7 cm abutting the peritoneum along the left paracolic gutter, displacing the left kidney, spleen, and pancreatic tail superiorly and posteriorly with focal wall calcification in the inferior aspect of the lesion [Figure 1]. The left upper ureter was compressed leading to mild hydronephrosis. Based on these radiological features, a provisional diagnosis of the retroperitoneal cyst was established, and with intent to completely excise this cyst, surgical intervention was planned. Midline vertical incision was given and after mobilizing the left colon, a large retroperitoneal unilocular cystic lesion was noted and it was not showing attachments to any surrounding structure or adjacent organ. The cyst was completely excised and sent for histopathological examination [Figure 2]. Microscopic examination revealed cystic structure with fibrocollagenous wall devoid of any lining epithelium with patchy chronic inflammatory cell
infiltrate [Figure 3]. Since no lining could be identified in this primary retroperitoneal cyst, diagnosis of the idiopathic retroperitoneal cyst was rendered.

The postoperative course was uneventful and he was discharged on day 3. During a follow-up of 3 months, he remains asymptomatic.

**DISCUSSION**

The primary retroperitoneal cystic lesion is usually confined to the retroperitoneal space and shows no connections to the adjacent organs or other retroperitoneal structures. Mostly, these primary cysts are benign in nature. These primary cystic lesions are uncommon, and they commonly arise from the embryonal-urogenital remnant, cell inclusion, retroperitoneal lymphatics, and due to trauma or parasitic infestations. The urogenital cyst can appear from the traces of the embryonic urogenital structures, and they are further subdivided into pronephric, mesonephric, and Mullerian subtypes. The lymphatic cyst can arise from the lymphatics of the intestine such as chylous cyst or the retroperitoneal lymphatics, i.e., lymphangiomas. These cysts are usually lined by the flattened endothelium. These cysts can be unilocular or multilocular filled with clear or whitish liquid. Dermoid cysts are a type of cell inclusion cyst, which can occur in this region. They are slow-growing cysts and contain mature tissues and sebaceous material. Traumatic cysts are usually formed as sequelae of posttraumatic hematoma. Parasitic cysts such as hydatid cysts are also described in this location.

In approximately one-third of cases, these cysts are detected incidentally. Most of these retroperitoneal lesions become symptomatic, once they attain a significant size. However, in some cases, it may present with backache, swelling of the lower limb, or radiating pain to the lower limb. CT scan seems to be preferred and frequently employed imaging modality to evaluate its location, relation to the surrounding structures, and characterization of the content of the cyst. In cases of clinically apparent or symptomatic cysts, exploration and complete excision should be done for diagnostic as well as for therapeutic purposes.

**CONCLUSION**

This case highlights the facts that idiopathic subtype of primary cyst is essentially benign in nature and complete excision seems to be curative in such cases. These types of primary cyst are rare and its occurrence has been documented in few cases.

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**Conflicts of interest**

There are no conflicts of interest.
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