Giant pancreatic mucinous cystadenoma masquerading as renal hydatid disease

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INTRODUCTION
Renal cystic lesions are often classified as benign or malignant based on imaging characteristics. Using the current diagnostic imaging techniques, it is difficult to differentiate renal neoplasms from essentially benign conditions without malignant potential. Here, we report an interesting case of giant pancreatic mucinous cystadenoma masquerading as renal hydatid disease.

CASE REPORT
A 54-year-old female presented with diffuse fullness of the abdomen for the past 3 months. Her past history was significant for exposure to multiple pet animals. Her examination revealed an ill-defined mass in the left upper abdominal quadrant. An abdominal contrast-enhanced computed tomography scan showed a multiseptated exophytic cystic lesion of 18 cm × 10 cm × 16 cm size from the upper pole of the left kidney displacing the spleen and pancreas. Magnetic resonance imaging abdomen showed an exophytic multicystic heterogenous hyperintense T2-weighted and hypointense T1-weighted lesion with thin hypointense internal septae seen arising from the superior pole of the left kidney [Figure 1]. Indirect hemagglutination test and enzyme-linked immunosorbent assay were negative. A diagnosis of multilocular renal cyst or renal hydatid cyst was made based on the imaging and planned for excision.

Oral albendazole (400 mg twice a day) was started for 2 weeks before surgery. Under general anesthesia, chevron incision was made and abdominal exploration was done. The left colon was reflected medially. A large dumbbell-shaped...
thick-walled cyst of size 18 cm × 12 cm × 12 cm with multiple loculi seen attached to the upper pole of the left kidney and was adherent to the distal pancreas and splenic vessels. On aspiration, thick mucoid straw-colored material was aspirated out. Scolicidal agent (5% povidone-iodine) was instilled. Renal vessels were dissected out and looped [Figure 2a]. Renal vessels were not clamped during the excision of the cystic lesion as the cyst wall had less vascularity and its margins were well delineated. The splenic vessels and distal pancreas were carefully dissected and preserved. The cyst was completely excised [Figure 2b] with a margin of renal tissue. The collecting system in the upper pole of the left kidney was not entered, and it was confirmed by intraoperative injection of methylene blue through a previously placed ureteric catheter in the renal pelvis. A tube drain was placed intraoperatively and removed on the 4th postoperative day. On gross examination, the cyst was a thick-walled, multilocular cyst with a dominant loculus and no brood capsules were found. Microscopic examination revealed the features of mucinous cystadenoma arising from the pancreas [Figure 3]. The patient had an uneventful recovery.

**DISCUSSION**

Mucinous cystic neoplasms of the pancreas are the most common pancreatic cystic neoplasms and account for around half of the cases. They are commonly seen in women. The present case demonstrates challenges in the confirmed preoperative diagnosis of mucinous cystic neoplasm of the pancreas. In this case, radiographic examination showed a large cyst arising from the upper pole of the left kidney leading to the diagnosis of multilocular renal cyst or renal hydatid cyst.

Although renal hydatid cyst is relatively uncommon in India, it accounts for around 2% of cases. In addition, there are several reports of pancreatic hydatid cyst masquerading as cystic pancreatic neoplasm. Sometimes, it is challenging
to diagnose cystic neoplasm of pancreas preoperatively based on radiological findings when the lesion is closely associated to the upper pole of the left kidney.

Mucinous cystic neoplasms have been extensively described in the pancreas, appendix, lung, breasts, and spleen. However, when they overlap with other organs, it may be difficult to get a correct preoperative diagnosis. To our knowledge, this is the first case report where a large pancreatic mucinous cystadenoma masquerading as renal hydatid disease. Considering the differential diagnosis of renal hydatid cyst, oral albendazole was started before the surgery.

In conclusion, Imaging can be unreliable in differentiating benign renal cysts from tumors of adjacent organs, raising a diagnostic dilemma. Surgical exploration and excision are required to reliably establish the etiology of the lesion. A benign pancreatic cystic neoplasm has to be considered as a differential diagnosis during the evaluation and management of giant renal cystic lesions, diagnosed by imaging.

Declaration of patient consent
The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest
There are no conflicts of interest.

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