Isolated renal echinococcosis: a rare disease

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DESCRIPTION

Primary renal hydatid cyst is a rare disease. A 35-year-old woman presented with heaviness and a mass on the right side of her abdomen for 1 year. No history of loss of appetite, generalised weakness or weight loss was present. The medical history was unremarkable. On examination, a firm globular bimanually palpable mass was present in the right lumbar area extending from the right subcostal margin to the right iliac fossa. Ultrasonography revealed a right cystic renal mass (figure 1A). MRI detected an ill-defined heterogeneous cystic lesion involving almost the whole of the right kidney (red arrow) and multiple small cystic areas (yellow arrow).

Figure 1 (A) Ultrasonography showing a right cystic renal mass (blue arrow). (B and C) MRI showing heterogeneous cystic lesion involving almost the whole of the right kidney (red arrow) and multiple small cystic areas (yellow arrow).
(15×12×10 cm) involving almost the whole of the right kidney, with a few foci of calcification and multiple small cystic areas without any significant vascularity, suggestive of a renal complicated hydatid cyst (figure 1B, C). After starting oral Albendazole, abdominal exploration was carried out, which revealed a multilocular large renal cyst with calcified patches on the surface extending medially beyond the renal hilum (figure 2). Considering this extensive involvement of the kidney, a right nephrectomy was performed. Sectioning of the specimen revealed that the larger cysts were filled with calcified material, hydatid membranes and daughter cysts (figure 2).

Histopathological examination revealed features of a hydatid cyst. Postoperatively, the oral Albendazole was continued. The patient was doing well 6 months after surgery.

Competing interests None declared.
Patient consent Obtained.
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REFERENCE

Learning points
- Isolated hydatid disease of the kidney is a rare condition and may present as a large asymptomatic renal mass in an otherwise relatively healthy patient.
- Renal hydatid disease should be considered in the differential diagnosis for cystic lesions of the kidney, especially when treating people in or those migrating from endemic areas for echinococcosis.
- On imaging, a complex renal hydatid cyst may mimic cystic renal cell carcinoma.
- PAIR (puncture, aspiration, injection of scolicidal agent, re-aspiration) therapy, excision of the hydatid cyst, partial nephrectomy or total nephrectomy with peri-operative antihelminthic coverage are the appropriate treatment options according to the size of the cyst and the level of involvement of the kidney.
- Blind aspiration and spillage during the surgical procedure should be avoided.

Figure 2 Intraoperative image showing calcified patches on the surface of the kidney (black arrow), whole kidney involved except for a rim of parenchyma at lower pole (orange arrow), smaller cysts (yellow arrow) having yellowish membrane filled with clear fluid and brood capsules (blue arrow).