



Isolated Renal Hydatid Cyst Masquerading as Cystic Renal Tumor

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Hydatid disease or echinococcosis is a zoonotic disease caused by cestode *Echinococcus granulosus*. In humans, isolated renal involvement or primary renal hydatid cyst of the kidney is rare and accounts for about 1%-5% of all the cases of hydatid cyst. Isolated renal hydatid cyst can mimic cystic renal tumor both clinically and radiologically. We present a rare case of isolated hydatid cyst in a 38-year-old male who was diagnosed as a case of cystic renal tumor on radiology. UROLOGY 133: e11–e12, 2019. © 2019 Elsevier Inc.

Isolated renal hydatid disease or echinococcosis is rare and accounts for 1%-5% of all the cases of hydatid cyst.¹⁻⁴ Clinically and radiologically, it can mimic

cystic renal tumor.⁵ We present a rare case of isolated renal hydatid cyst in a 38-year-old male who presented with right flank pain. Computerized tomography (CT)

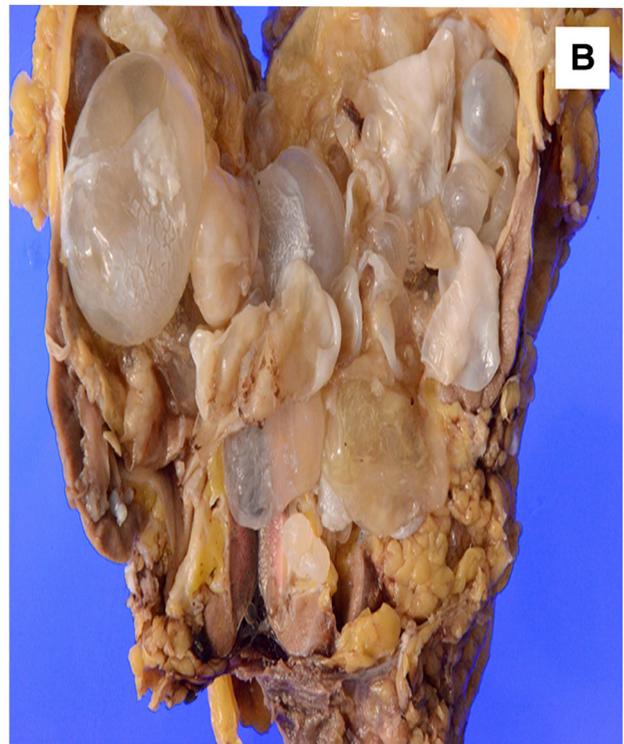


Figure 1. (A) Computerized tomography of abdomen shows a large lobulated solid cystic mass measuring 10 × 8 × 5 cm located in the upper and middle pole replacing almost the entire right kidney. (B) Gross image of the resected right kidney showing a large unilocular cyst with pearly white and translucent membranes (ecto cyst).

Conflicts of interest: None identified.

Source of income: Nil.

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scan showed a large lobulated cystic mass measuring 10 × 8 × 5 cm located in the upper and middle pole (Fig. 1A). Preoperative diagnosis of cystic renal neoplasm was made and patient underwent laparoscopic right nephrectomy. On gross, a unilocular cyst measuring 10 cm in diameter and having pearly white translucent membranes was noted (Fig. 1B).

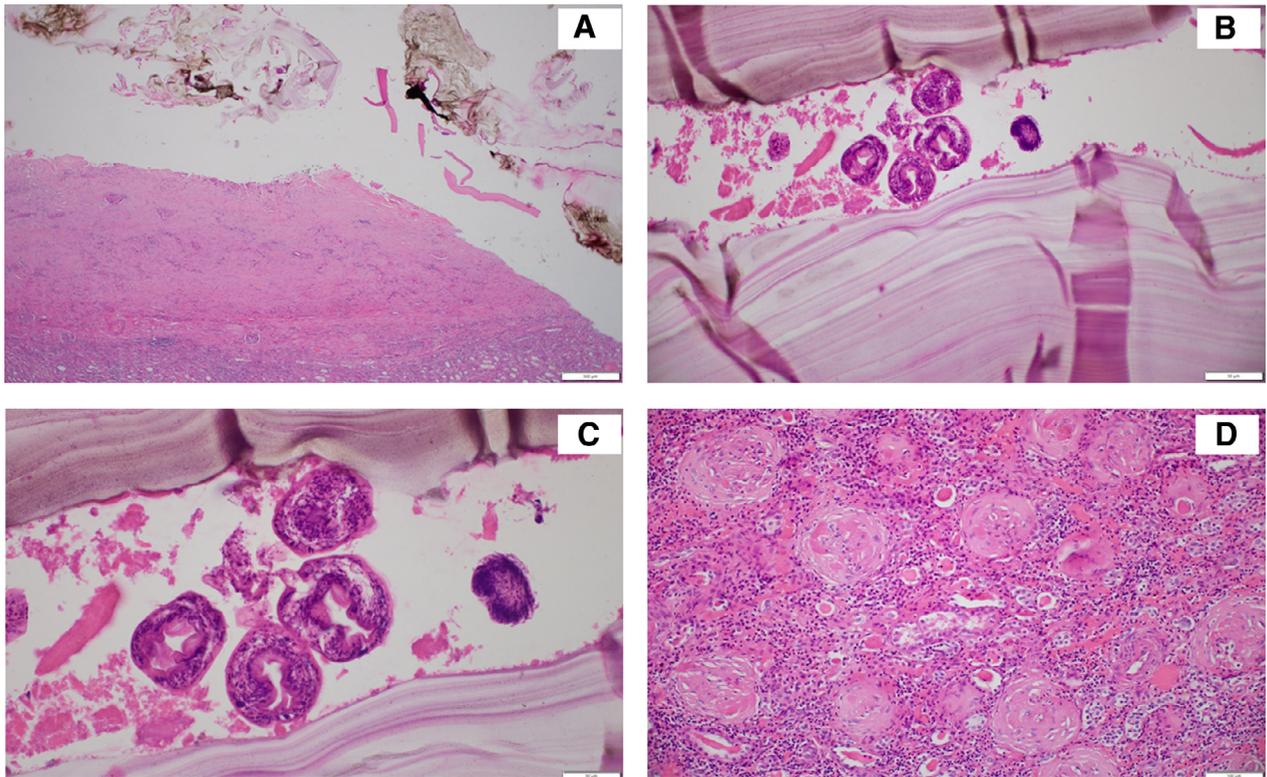


Figure 2. (A) Photomicrograph shows hydatid cyst and compressed renal parenchyma (Hematoxylin and Eosin stain, 100×). (B) Photomicrograph shows laminated, avascular, eosinophilic, chitinous, and refractile membranes (ecto-cyst) with scolices (Hematoxylin and Eosin stain, 200×). (C) Photomicrograph of scolices with hooklets (Hematoxylin and Eosin stain, 400×). (D) Photomicrograph shows adjacent compressed renal parenchyma with many sclerosed glomeruli and atrophic tubules with colloid-like hyaline casts (Hematoxylin and Eosin stain, 200×).

The microscopy revealed 3 distinct layers of the cyst wall; the pericyst composed of fibrocollagenous tissue (Fig. 2A), the ectocyst comprised of laminated eosinophilic membrane (Fig. 2B) and the inner germinative layer. Many scolices were also seen (Fig. 2C). Adjacent renal parenchyma showed chronic pyelonephritis (Fig. 2D). To conclude, isolated hydatid cyst of the kidney is rare and can be easily misdiagnosed due to nonspecific manifestations. Hence, it should always be included in differential diagnosis of cystic renal mass, since majority cases are misdiagnosed as cystic renal neoplasm.

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