Isolated Renal Hydatid Cyst 
Masquerading as Cystic Renal Tumor

Vikram Singh, Sudheer Kumar Devana, Ujjwal Gorsi, and Amanjit Bal

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. Clinically and radiologically, it can mimic cystic renal tumor. 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) scan showed a large lobulated cystic mass measuring 10 × 8 × 5 cm located in the upper and middle pole replacing almost the entire right kidney.

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.

From the Department of Histopathology, Postgraduate Institute of Medical Education and Research, Chandigarh, India; the Department of Urology, Postgraduate Institute of Medical Education and Research, Chandigarh, India; and the Department of Radiology, Postgraduate Institute of Medical Education and Research, Chandigarh, India.

Address correspondence to: Amanjit Bal, M.D., Department of Histopathology, Postgraduate Institute of Medical Education and Research, Chandigarh, India. E-mail: docaman5@hotmail.com

Submitted: April 5, 2019, accepted (with revisions): July 15, 2019

https://doi.org/10.1016/j.urology.2019.07.014

© 2019 Elsevier Inc.

All rights reserved.
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.

**References**