

Spontaneous reduction of a minimally complex cyst mimicking a renal cancer

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Abstract

Renal cyst shrinkage is a rare finding. Since the collapsed cystic walls may mimic soft tissue components, this scenario has to be taken into account in the differential diagnosis of benign and malignant renal cysts.

KEY WORDS

computed tomography, magnetic resonance imaging, renal cyst reduction

1 | CLINICAL IMAGE

A 82-year-old male patient with an acute episode of left-sided abdominal pain underwent multiphase contrast-enhanced CT.

A large exophytic renal lesion (12 cm) was detected at the lower pole of the left kidney, characterized by clear fluid content (HU <10), thin walls with few minute calcifications (Bosniak classification type II), and a displacing mass-effect on the adjacent structures (Figure 1).

Considering the symptoms and the risk of an intra-abdominal disruption, MRI scan was planned in order to further evaluate the lesion content prior to proceed to percutaneous aspiration.

Approximately one month later, MRI showed a significant volume reduction of the cyst (5 cm) and an inhomogeneous

content due to the coexistence of fluid and pseudosolid components (Figure 2).

The patient was discharged with no need of aspiration and has been asymptomatic so far.

The role of cross-sectional imaging is already well established in detecting and characterizing renal lesions.¹

Although extremely rare, volume decreasing of renal cysts can occur due to different causes.²

In our case, a spontaneous emptying of renal cyst into renal goblets was the most likely hypothesis.

In conclusion, shrinkage of large cysts, either if they are simple or minimally complicated, can mimic indeterminate or malignant renal lesions and has to be accurately evaluated for a correct differential diagnosis.

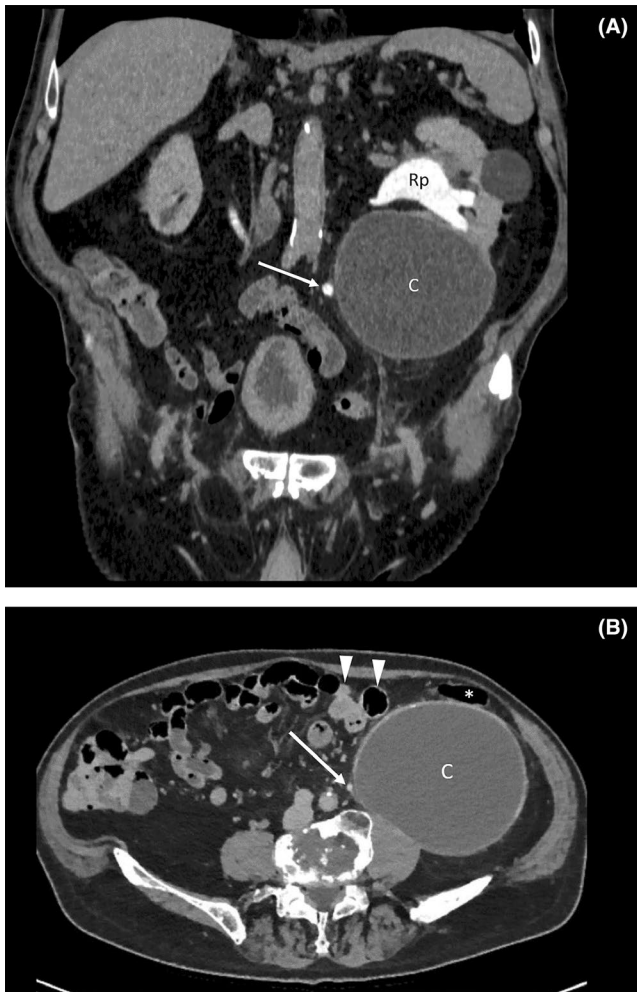


FIGURE 1 Coronal (A) and axial (B) contrast-enhanced CT scan obtained during renal excretory phase showing the large renal cyst (C) arising from the lower pole of the left kidney with narrowing of ipsilateral ureter (arrow) and dilation of the renal pelvis (Rp), medial displacement of ileal loops (arrowheads), and anterior dislocation of descending colon (asterisk)

CONFLICT OF INTEREST

None declared.

AUTHOR CONTRIBUTIONS

GC: drafted and reviewed the manuscript. AB: conceived the idea and contributed in manuscript writing. FI: reviewed the literature. MFM: collected the images. SM: reviewed and accepted the final version of the manuscript.

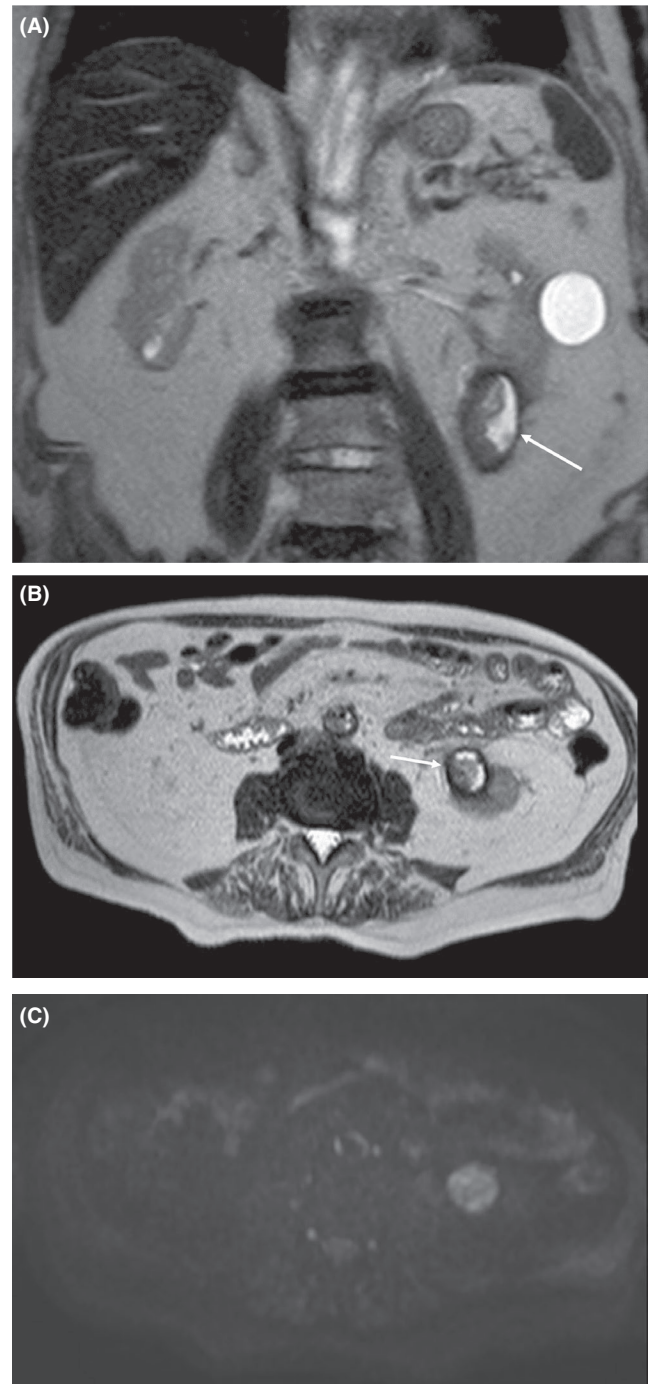


FIGURE 2 Coronal T2-w TSE (A), axial T2-w TSE (B), and axial b800 DWI scan (C) images demonstrating a significant shrinkage of the cyst (arrow) with inhomogeneous content due to the coexistence of fluid and pseudosolid tissue. The patient did not refer any complaint between the performance of the two radiological examinations

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