Renal Artery Aneurysm Manifested as Parapelvic Cyst on Abdominal Sonography

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Renal artery aneurysm can manifest as a parapelvic cyst on abdominal sonography, of which only 2 cases have been reported [3, 4]. In this case, abdominal CT was the method used to differentiate these lesions. We recommend that renal artery aneurysm be included in a differential diagnosis of parapelvic cysts.

Dear Sir,

Abdominal sonography plays an important role in the diagnosis of renal masses and has been used as the initial diagnostic tool for differentiating both cystic and solid mass lesions in the kidney. However, a number of diagnostic difficulties still exist in both identifying and defining mass lesions [1]. We present an unusual case of a renal artery aneurysm which was diagnosed as a parapelvic cyst following abdominal sonography.

A 66-year-old man was admitted to Kangnam St. Mary's Hospital for an evaluation of a renal cystic mass. A routine health examination was carried out 1 month before admission, and abdominal sonography revealed a parapelvic cyst in the left kidney (fig. 1a). On admission, he was asymptomatic and his blood pressure was 120/80 mm Hg. There was no palpable tender mass and audible abdominal bruit. Routine urinalysis was normal. An abdominal CT scan showed a round enhancing mass, sized $6 \times 5 \times 5$ cm, in the left renal hilar area (fig. 1b), which was confirmed as a renal artery aneurysm by renal angiography (fig. 1c). Aneurysmectomy with an end-to-end saphenous vein graft was performed, and the patient was discharged in good condition.

Renal artery aneurysm is an uncommon, potentially fatal abnormality. Most patients are asymptomatic and clinical problems arise when they develop renovascular hypertension, when rupture occurs, or when the aneurysm leads to thrombosis, infarction, or renal embolism. Although the only definite method to diagnose a renal artery aneurysm is angiography, CT may be useful when employed in the initial stages of the evaluation [2]. Fig. 1. Abdominal sonography (a), CT (b) and renal angiographic (c) findings of renal artery aneurysm. Arrow shows the aneurysm.

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