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Polycystic horseshoe kidney

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A 49-year-old woman with autosomal dominant polycystic kidney disease (ADPKD) was hospitalized for gross hematuria, pyelonephritis and abdominal pain.

An abdominal unenhanced computed tomography (CT) scan confirmed the presence of multiple hepatic and bilateral renal cysts, showing staghorn kidney stones on the left side; moreover, the lower poles of the kidneys were fused, suggesting a diagnosis of polycystic horseshoe kidney (Fig. 1). One year later, the patient started dialysis and was again hospitalized because of the new occurrence of symptoms.She therefore underwent laparoscopic partial nephrectomy of the left renal unit of the horseshoe kidney.

The association between ADPKD and horseshoe kidney is rare (1 in 134,000 to 1 in 8 million cases), and is reported in fewer than 20 cases in the literature. Co-occurrence of these diseases may lower the age of renal failure and favour the occurrence of symptoms. In this case, we performed a laparoscopic partial nephrectomy of the left renal unit of the polycystic horseshoe kidney with complete resolution.

Conflict of interest The authors have declared that no conflict of interest exists.

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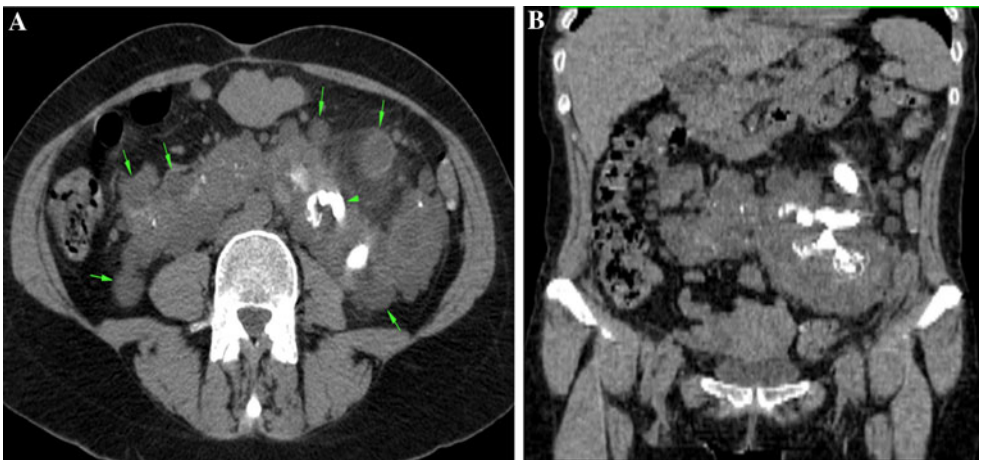

Fig. 1 **a** Unenhanced CT scan in the oblique axial view, showing multiple cysts (*arrows*) involving the horseshoe kidney, with associated multiple renal stones (*arrowhead*). **b** Unenhanced CT scan in the coronal view, showing multiple cysts involving the horseshoe kidney, with associated multiple renal stones