Kidney solitaire: pearls to share
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A 25-year-old lady, with a history of recurrent second trimester pregnancy loss, was referred to us for intermittent pedal oedema, nausea and vomiting of 6 months’ duration. She also noticed slowly-progressive swelling of abdomen over the last 10 years. On examination, patient was grossly undernourished; abdomen was hugely distended and cystic in feel.

Figure 1. Figure showing the abdominal swelling

Routine investigations revealed anaemia (haemoglobin 8.4 gm%), raised serum urea (61 mg%) and creatinine (2.2 mg%), and microscopic haematuria.

Ultrasonography (USG) of abdomen showed a large septate cystic mass occupying the whole of the abdomen. Computed tomography (CT) scan of abdomen is shown.
Figure 2. Contrast-enhanced CT scan of abdomen showing a huge cystic septate mass occupying the whole of the abdomen

What is the diagnosis?
**Answer**

CT scan showed *absence of right kidney* along with gross hydronephrosis of left kidney with thinned out renal cortex resulting from intrinsic obstruction at pelviureteric junction (PUJ). On laparotomy, obstruction could be easily negotiated through double J stent.

Postoperatively, patient had rapid profuse diuresis with near complete resolution of the swelling. Serial USG showed complete resolution of hydronephrosis and renogram revealed stable renal excretory function.

**Discussion**

In patients with solitary kidney, 40% have associated urologic anomalies in the collecting system and nearly 13% have stenosis at the PUJ. Congenital solitary kidney with hydronephrosis is a rare anomaly with mean age of diagnosis at 10 years. Majority are asymptomatic and detected on ultrasound examination. However, 15% have an irreversible lesion of variable severity.

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