



Medial Renal Ptosis: First Radiographic Documentation With Computed Tomography

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Medial renal ptosis is the abnormal mobility of the kidney towards or across the midline of the body. Historically, this phenomenon is evaluated by observing abnormal mobility in the lateral decubitus position during intravenous pyelography. Here, we present the first radiographic documentation of this anomaly on computed tomography on a 34-year-old female who experienced an intermittent abdominal bulge over her right upper quadrant. Nephropexy is the definitive treatment for symptomatic patients. Further studies are required to determine the true prevalence and clinical significance of this phenomenon. *UROLOGY* 126: e1–e2, 2019. Published by Elsevier Inc.

A 34-year-old female was referred with an abnormal computed tomography (CT) scan after experiencing an intermittent abdominal bulge over her right-upper quadrant. CT scan revealed abnormal positioning of her right kidney in the anterior, medial aspect of her abdomen (Fig. 1). She denies any pain or lower urinary tract symptoms. Abdominal examination

during urologic consultation was unremarkable. Intravenous pyelogram performed showed both kidneys in the anatomical position with good pelvocalyceal filling (Fig. 2). Repeat CT scan 6 months later revealed bilateral kidneys assuming its normal position (Fig. 3).

Medial renal ptosis is the abnormal mobility of the kidney towards or across the midline of the body.¹ This is dis-

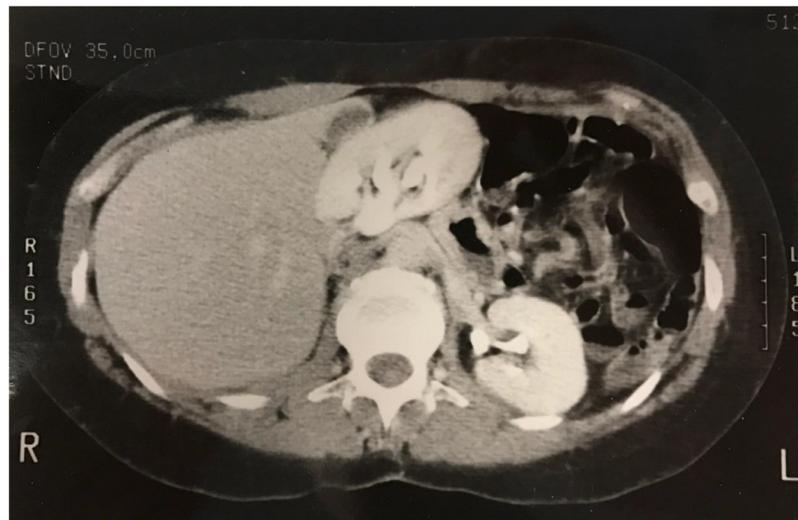


Figure 1. Axial computed tomography scan at initial presentation revealing medial deviation of the right kidney with moderate hydronephrosis. The patient denies any abdominal pain or lower urinary tract symptoms.

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tinct from vertical ptosis, which is caudal mobility of the kidney in the body's upright position. Historically, this anomaly is evaluated radiographically by observing abnormal mobility in the lateral decubitus position during

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Figure 2. Intravenous pyelography of the patient in the erect position revealing bilateral kidneys anatomically positioned, with good pelvocalyceal filling and minimal deviation of the right ureter. There was no evidence of obstruction.

pyelography. We present the first CT documentation of this anomaly. The pathogenesis is believed to be due to defects in the fascial and paracapsular layers of the kidney, allowing it to be displaced from its normal anatomical



Figure 3. Repeat axial computed tomography scan after 6 months revealed normal anatomical position of the right kidney when patient was lying in the supine position.

fossa.² Nephropexy is the definitive treatment for symptomatic patients.³ Further studies are required to determine the true prevalence and clinical significance of this phenomenon.⁴

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