Herniated Kidney

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Postoperative incisional hernia is a relatively common complication following abdominal surgery. Herniation of the kidney is a less common entity and typically occurs as a congenital or acquired diaphragmatic defect, and rare case reports have demonstrated partial flank or lumbar herniation of the kidney. Herein we present a unique case of a postoperative incisional hernia containing the entire right kidney. UROLOGY 123: e7–e8, 2019. © 2018 Elsevier Inc.

A 52-year-old obese woman with chronic ventral hernia presented to the Emergency Department with abdominal pain and diarrhea concerning for partial bowel obstruction. Three years prior, at another institution, she underwent an open partial nephrectomy via flank approach for a 3 cm right lower pole clear cell renal carcinoma. Vital signs were unremarkable and physical examination revealed morbid obesity (BMI 50 kg/m^2) and a mildly tender nonreducible ventral hernia. Flank examination demonstrated a prominent, nontender, nonreducible, and smooth right flank mass.

Laboratory analyses revealed a white blood cell count of 10.4 (reference 3.7-11 thousand/mL) and serum creatinine of 0.72 mg/dL. Abdominopelvic contrast-enhanced computed tomography (Supplementary Video 1) visualized the known ventral hernia and also identified a large right flank hernia containing the right kidney with elongated vessels (Fig. 1A) and mild hydronephrosis (Fig. 1B). The patient clinically improved with conservative treatment and was discharged with plans for elective staged hernia repair following medical optimization.

Kidney herniation is a rare entity limited to sporadic case reports involving congenital or traumatic thoracic herniation,[1-5] congenital lumbar herniation,[6] postoperative renal transplant allograft herniation,[7] or partial orthotopic kidney herniation.[8-11] To the authors' knowledge, the report herein represents the first documented case of complete orthotopic native kidney herniation.

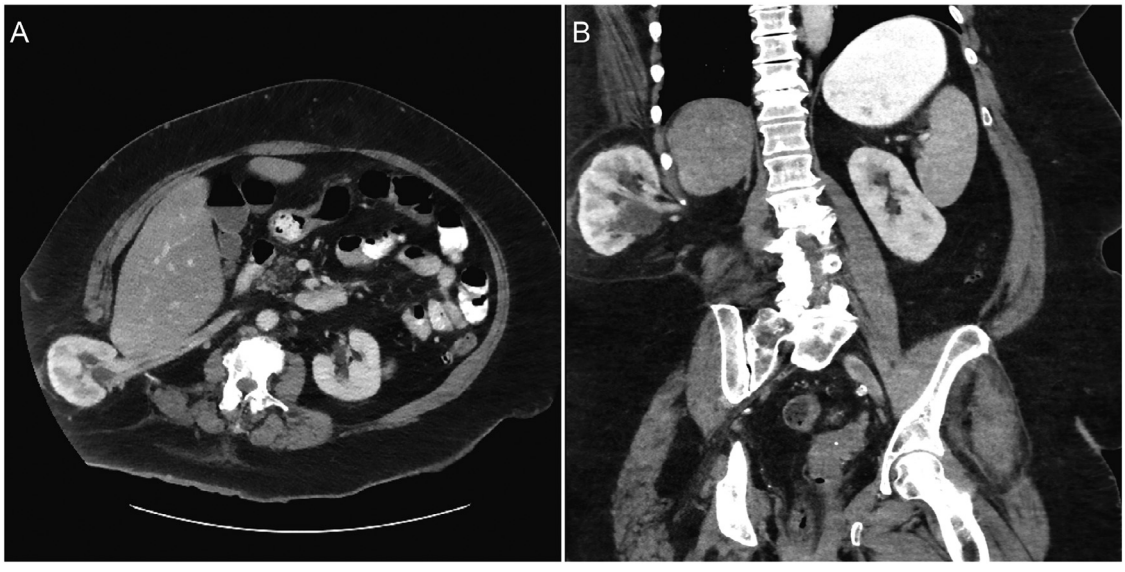

Figure 1. Contrast-enhanced "computed" axial (Panel A) and coronal (Panel B) computed tomography of the abdomen and pelvis demonstrating complete herniation of the right kidney and collecting system through the flank with associated elongation of the renal vessels and mild hydronephrosis.

The authors of this study report no financial conflict of interest.

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SUPPLEMENTARY MATERIALS

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.urology.2018.09.026.

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