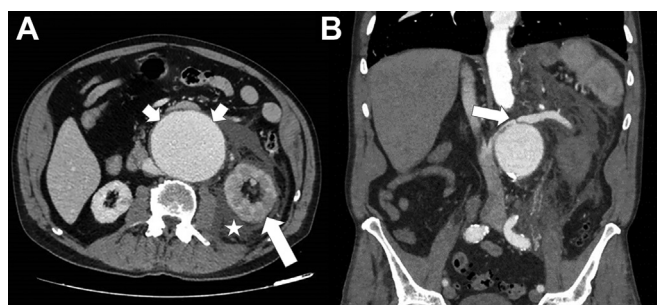


**Figure 1.** A, Longitudinal ultrasonography of the left kidney showing mild hyperechoic parenchyma with a small amount of perinephric fluid (white arrows). B, Transverse ultrasonography demonstrating a large abdominal aortic aneurysm up to 8 cm.



**Figure 3.** Angiography: aortogram demonstrating aortic and iliac stents after endovascular aortic repair.



**Figure 2.** A, Computed tomography, arterial phase, axial view, demonstrating the abdominal aortic aneurysm (short arrows), poor enhancement of the left kidney (long arrow), and left perinephric fluid (asterisk). B, Computed tomography, arterial phase, coronal view, demonstrating an aorto-left retroaortic renal vein fistula (white arrow).

[Ann Emerg Med. 2022;80:e65-e66.]

An 81-year-old man with a peripheral vascular disease presented to the emergency department with acute left flank pain for several hours that resolved after oral analgesia. He was hemodynamically stable, and his abdomen and flank were soft and nontender. Laboratory tests included an acutely increased creatinine level of 1.5 mg/dL. A bedside ultrasound demonstrated a hyperechoic left kidney with perinephric fluid and an abdominal aortic aneurysm of 8 cm (Figure 1). Abdominal computed tomography demonstrated an abdominal aortic aneurysm with aorto-left retroaortic renal vein fistula and secondary renal vein infarction with decreased parenchymal enhancement and perinephric fluid (Figure 2).

*For the diagnosis and teaching points, see page e66.*

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## IMAGES IN EMERGENCY MEDICINE

*(continued from p. e65)***DIAGNOSIS:**

*Aorto-left retroaortic renal vein fistula.* An abdominal aortic aneurysm complicated with an aorto-left retroaortic renal vein fistula is extremely rare.<sup>1</sup> The presenting symptoms include left flank pain, hematuria, and renal dysfunction secondary to increased venous pressure.<sup>2</sup> Emergency computed tomography with arterial and venous phase contrast is the imaging modality of choice. Treatment methods in stable patients include endovascular aortic repair and open surgery for aneurysm and fistula repair.<sup>3</sup>

The patient underwent successful emergency endovascular aortic repair ([Figure 3](#)).

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