

## Aortocaval Fistula

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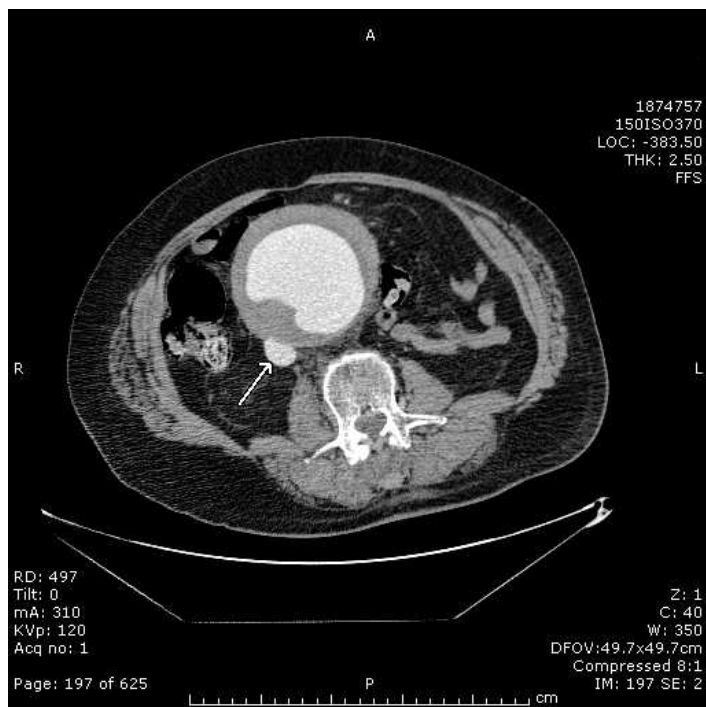
A 77-year-old Caucasian male with a history of hypertension presented with sudden onset of lower back pain, nausea, and vomiting. Initial vital signs included a pulse rate of 104 beats/minute, a blood pressure of 117/72 mm Hg, and pulse oximetry of 95% on room air. Abdominal examination revealed a midline pulsatile mass and bruit. The patient had bilateral lower extremity edema, which was worse on the right side. Right-sided dorsalis pedis and posterior tibial arteries were not palpable.

Computed tomography of the abdomen revealed a large 11 × 9-cm fusiform infrarenal abdominal aortic aneurysm (AAA) extending to both external iliac arteries, with contrast

opacification of the inferior vena cava (Figure 1).

Reconstruction imaging identified a fistula between the right common iliac artery and vein (Figure 2). The patient emergently went to the operating room and underwent repair of the AAA and ilio-iliac fistula with placement of an aortobi-iliac graft.

The reported incidence for aortocaval fistulas subsequent to an AAA is 3% to 4%. The classic triad of back or abdominal pain, a pulsatile abdominal mass, and abdominal bruit is only present in 63% of patients.<sup>1</sup> Thus, aortocaval fistulas are missed preoperatively in 50% of patients.<sup>2</sup> Presentations vary, depending on the site of fistula formation, but include high-output heart failure due to a compensatory increased stroke



**Figure 1.** Computed tomography of the abdomen with contrast opacification of the inferior vena cava suggesting an aortocaval fistula.



**Figure 2.** Reconstruction imaging showing fistula between iliac artery and vein.

volume and regional venous hypertension, such as lower extremity edema.

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