Primary external iliac vein aneurysm with generalized venomegaly

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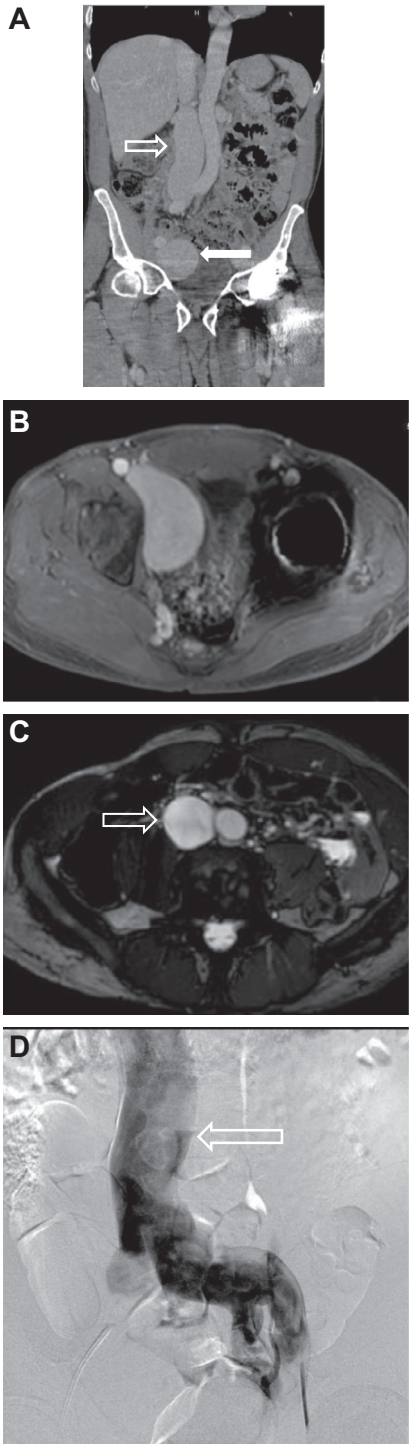
Primary iliac vein aneurysms are exceedingly rare. We present the case of a 62-year-old man who, after left hip arthroplasty, was found on surveillance computed tomography to have an incidental right external iliac vein aneurysm (*solid white arrow*) with dilation of the inferior vena cava (IVC) (*A*; *hollow white arrow*). Magnetic resonance angiography demonstrated a 5.3-cm right external iliac vein aneurysm (*B*/Cover) and generalized venomegaly. The IVC was dilated to 36 mm (*C*; *hollow white arrow*) with renal vein ectasia. Duplex ultrasound and axial computed tomography of the lower extremities did not demonstrate any venous ectasia or arteriovenous fistula. The patient did not have a family history of aneurysms or arteriovenous malformations. He had no lower extremity edema, varicose veins, or any evidence of venous insufficiency. The workup findings for connective tissue disorders were negative. The patient had been an avid bicyclist for >30 years. Duplex ultrasound, angiography, and venography did not identify an arteriovenous fistula but confirmed enlargement of the IVC (*D*; *hollow white arrow*).

The iliac system is the least frequent location for venous aneurysms, which can be primary or secondary to an underlying cause.[1] The most common etiology of a secondary iliac vein aneurysm is arteriovenous fistula.[2] Complications of iliac vein aneurysms include thromboembolism and rupture, which require prompt intervention.[3] Given the complication profile, intervention is generally recommended for iliac vein aneurysms. The surgical treatment options include ligation, excision with interposition grafting, and tangential excision with lateral venorrhaphy.[4] Recently, endovascular therapy using arterial stent-grafts for venous aneurysm exclusion has been reported.[5]

Our patient's pathology was possibly the result of a genetic predisposition coupled with his strenuous, extensive cycling history. Given the absence of any symptoms, he resumed his exercise regimen and has undergone alternating duplex ultrasound studies and computed tomography scans every 6 months. Expectant management was selected given the patient's preference and generalized venomegaly compromising definitive repair.



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Although a few case reports have described iliac vein aneurysms, to the best of our knowledge, the present report is the first to describe primary iliac vein aneurysm in the setting of generalized venomegaly. The patient provided written informed consent for the report of his case and accompanying imaging studies.

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