Incidental Pelvic Arteriovenous Malformation

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A 39-year-old man underwent computed tomography (CT) for abdominal pain and nausea. A 5-cm right internal iliac vascular aneurysm and likely arteriovenous malformation (AVM) was incidentally noted by CT, which was also positive for a 2-cm stone in the gallbladder neck. He underwent uneventful cholecystectomy and was then referred to interventional radiology for consultation regarding the internal iliac aneurysm. The patient was asymptomatic from the AVM (Schobinger stage 1). Given the large aneurysm and the propensity for most AVMs to progress throughout a lifetime, planning angiography was performed to assess the AVM and anatomic considerations for treatment.

Planning angiography was performed (Figure 1A) with dynamic cone beam CT and 3-dimensional reformation (Figure 1B). This revealed a right internal arteriovenous malformation with a single draining venous aneurysm. Dynamic cone beam computed tomography assists in the delineation of branches supplying the arteriovenous malformation.

FIGURE 1. A, Pelvic angiography reveals a complex high-flow right internal iliac arteriovenous malformation with a single draining venous aneurysm. B, Dynamic cone beam computed tomography assists in the delineation of branches supplying the arteriovenous malformation.

FIGURE 2. Endovascular embolization of the arteriovenous malformation.
iliac artery AVM with a large dilated 5-cm single venous outflow aneurysm (AVM classification type II). The right inferior vesicle artery branches were involved, with abnormal shunting into the dilated venous aneurysm. After discussion, the patient elected to proceed with embolization (Figure 2). Endovascular embolization was performed with transarterial absolute alcohol and cyanoacrylate glue, followed by transvenous sclerotherapy of the large venous aneurysm using 3% sodium tetradecyl sulfate. On 1-year follow-up CT, there was no further evidence of AVM or venous aneurysm.

Potential Competing Interests: The author reports no competing interests.

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