"The Thrill is Gone": Visualization and Treatment of an Arteriovenous Fistula
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An 87-year-old woman underwent placement of a permanent pacemaker for recurrent near-syncope and sick sinus syndrome. Left subclavian vein access was difficult to obtain despite multiple attempts, and the pacemaker was ultimately placed on the right side. After surgery, the patient developed a mediastinal hematoma necessitating transfusion. No other acute interventions were required. Over the next 8 weeks, the patient developed progressive fatigue, weakness, exertional dyspnea, and lower-extremity edema. The pacemaker was functioning normally. Diuretic and ACE inhibitor therapies were instituted, which improved but did not resolve the patient’s symptoms. The patient was referred to our institution for further evaluation.

The blood pressure was 105/80 mm Hg, and the heart rate was 72 bpm and regular. The lungs were clear to auscultation. A prominent thrill was appreciated adjacent to her left clavicle. A loud to-and-fro bruit was audible across her precordium.

The patient underwent angiography, which revealed an arteriovenous fistula. The arteriogram on the left is a visualization of the left subclavian artery and its branches, demonstrating a fistula between the left internal mammary artery (large arrow) and the left subclavian/brachiocephalic vein (small arrow). The left internal jugular vein is seen to be filling in a retrograde fashion. After coil embolization, the left internal mammary artery is occluded (right, arrow), and no venous structures are seen during arterial injection. The thrill was not palpable after the procedure. The patient was discharged the next day, and all of her symptoms resolved over the next week.

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Circulation encourages readers to submit cardiovascular images to Dr Hugh A. McAllister, Jr, St Luke’s Episcopal Hospital and Texas Heart Institute, 6720 Bertner Ave, MC1–267, Houston, TX 77030.

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