## **IMAGES IN CARDIOLOGY**

## **Arteriovenous Malformation**

## Culprit or Innocent Bystander?

Michel K. Barsoum, MD,\* Eric E. Williamson, MD,† Robert D. McBane II, MD\*

Rochester, Minnesota



From the \*Division of Cardiovascular Diseases, Section of Vascular Diseases, and †Department of Radiology, Mayo Clinic College of Medicine, Rochester, Minnesota. Manuscript received January 6, 2009; accepted January 21, 2009. 75-year-old woman with a history of a large infrascapular congenital arteriovenous malformation (AVM) presented with progressive fatigue and weakness. Treadmill stress echocardiography and right and left heart catheterization were unremarkable. Cardiovascular examination revealed a prominent subscapular bruit but was otherwise normal.

A computed tomography angiogram with 3-dimensional reconstruction revealed an extensive AVM in the right paraspinal musculature (A, arrow). This malformation is fed predominantly by branches of the thyrocervical trunk (B, arrow) off the right subclavian artery and branches of a right intercostal artery (B, arrow). Venous drainage (C, short arrow) was via collateral veins into bilateral brachiocephalic veins (C, long arrow).

Neurology was consulted. Pyridostigmine, prescribed for congenital myasthenia gravis, resulted in marked symptom improvement. We later learned of a family history of congenital myopathy in 3 paternal relatives.

Management of AVMs should focus on symptom control as opposed to cure.