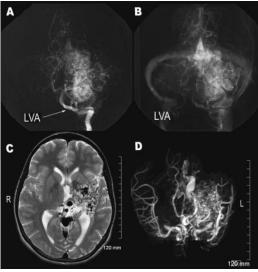
Giant arteriovenous malformation presenting as pediatric task-specific dystonia

Figure 1 Left vertebral artery (LVA) angiogram, sagittal T2 MR imaging, and MRA



Arterial (A) and venous phase (B) of the LVA angiogram in anteroposterior view showing the giant arteriovenous malformation (AVM) that involves the left thalamus and putamen and extends to the left medial temporal lobe. The giant AVM presented as task-specific dystonia that progressed to right hemidystonia. (C) Sagittal T2 MR imaging demonstrates the large left cerebral hemispheric AVM involving the left temporal lobe, left basal ganglia, and left thalamus. (D) MRA demonstrates the large tangle of vessels in the left hemisphere consistent with the AVM.

Figure 2 Posturing of the right upper limb as part of right hemidystonia associated with the left deep hemispheric arteriovenous malformation



An 11-year-old girl presented with difficulties writing and playing the flute for 6 months. Her dystonic symptoms progressively involved her right shoulder and arm muscles, and by age 16 right hemidystonia was diagnosed (see video on the *Neurology*® Web site at www.neurology.org). Brain MRI revealed a Spetzler–Martin grade V (>6 cm)¹ left deep hemispheric arteriovenous malformation (AVM). Arteriography confirmed the finding (figure 1). Embolizations did not produce clinical benefit. Surgical radiotherapy and deep brain stimulation were contraindicated. Oral medications failed to control symptoms and botulinum toxin type A injections improved dystonia but were associated with limb weakness. Although rare,² AVMs should be considered in the differential diagnosis of pediatric task-specific dystonia (figure 2).

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