



Supplementary Video 1. DSA of the same patient as Figure 1 (50-year-old man, left cuneus AVM, Spetzler-Martin grade II), demonstrating the feeding arteries, nidus, and draining vein. DSA, digital subtraction angiography; AVM, arteriovenous malformation.

https://youtube.com/shorts/O7qRIOU_oRM



Supplementary Video 2. MR-DSA (TWIST) of the same patient as Figure 1, demonstrating the feeding arteries, nidus, and draining vein. MR-DSA, magnetic resonance-digital subtraction angiography.

<https://youtube.com/shorts/A32FluwrAUg>



Supplementary Video 3. DSA of the same patient as Figure 2 (67-year-old woman, right transverse-sigmoid sinus DAVF, Cognard type IIb), demonstrating the transosseous channel, shunting point, and draining veins. DSA, digital subtraction angiography; DAVF, dural arteriovenous fistula. <https://youtube.com/shorts/UDIt6maH7Ms>



Supplementary Video 4. MR-DSA (TWIST) of the same patient as Figure 2, demonstrating the transosseous feeders, shunting point, and draining veins. MR-DSA, magnetic resonance-digital subtraction angiography.

<https://youtube.com/shorts/kBnJFqnBhIU>



Supplementary Video 5. A woman in her 30s with a right parietal AVM (Spetzler-Martin grade III). MR-DSA using TWIST acquired with a reduced gadolinium dose (0.02 mmol/kg, 20% of standard dose) demonstrated substantial image noise, precluding reliable evaluation of the shunt angioarchitecture. AVM, arteriovenous malformation; MR-DSA, magnetic resonance-digital subtraction angiography.

<https://youtube.com/shorts/7lhrTvvvPIQ>



Supplementary Video 6. The same patient as Supplementary Video 5. IT-TWIST reconstruction from the same reduced-dose acquisition demonstrated sufficient image quality for evaluation of the feeding arteries, nidus, and draining vein of the right parietal AVM. AVM, arteriovenous malformation; IT-TWIST, iterative time-resolved angiography with interleaved stochastic trajectories.

<https://youtube.com/shorts/h18ix7vDPQw>



Supplementary Video 7. A 34-year-old woman with a left temporal AVM (Spetzler-Martin grade IV). A single-slice GRASP MR-DSA at the level of the sella turcica (8 spokes per frame; temporal resolution, 1.35 seconds) demonstrating the dynamic contrast enhancement through the shunt. AVM, arteriovenous malformation; MR-DSA, magnetic resonance-digital subtraction angiography.

<https://youtu.be/XUVx28AOKi8>



Supplementary Video 8. A 74-year-old man with a left transverse-sigmoid sinus DAVF (Cognard type IIA+B, Borden type II). MIP reformation of GRASP MR-DSA (8 spokes per frame; temporal resolution, 1.35 seconds) demonstrating the dynamic flow through the shunt, including retrograde cortical venous drainage. DAVF, dural arteriovenous fistula; MIP, maximum intensity projection; MR-DSA, magnetic resonance-digital subtraction angiography.

<https://youtube.com/shorts/2W8Wulb1JZU>



Supplementary Video 9. A 72-year-old man with a suspected transverse-sigmoid sinus DAVF with drainage into the anterior condylar confluence and retrograde flow into the inferior petrosal sinus, with possible cortical venous reflux. MR-DSA using mASTAR demonstrated feeders from the occipital artery, tentorial artery, and middle meningeal artery. DSA was not performed due to renal impairment, and the diagnosis remains presumptive based on MRI findings alone. DAVF, dural arteriovenous fistula; MR-DSA, magnetic resonance-digital subtraction angiography.

<https://youtu.be/MLmD4cUescU>