

Clinical Image

Teaching Neuroimages: Sagittal Sinus Pseudo-Occlusion: a Case of Bilateral AVM

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A 49-year-old female presented with sudden onset headache and rapidly declined to a GCS of 4T. Head CT demonstrated bilateral posterior frontal hemorrhages suggestive of sagittal venous thrombosis (Figure 1). CT venogram suggested absence of sagittal sinus flow consistent with occlusion. DSA showed bilateral thalamic AVMs with a patent superior sagittal sinus as explored by venous catheterization (Figure 1). Bilateral symmetrical cerebral AVMs are extremely rare [1]. In this case, classically bilateral parenchymal hemorrhages are suggestive of venous thrombosis, here supported by CTV, however definitive DSA demonstrated sinus patency. This case serves as an example of AVM shunting mimicking thrombosis on CTV imaging.

Reference

1. Okada Y, Shima T, Nishida M, Yamane K. Bilateral symmetrical cerebral arteriovenous malformations in the basal ganglia--case report. *Neurol Med Chir (Tokyo)*. 1992; 32: 88-92.

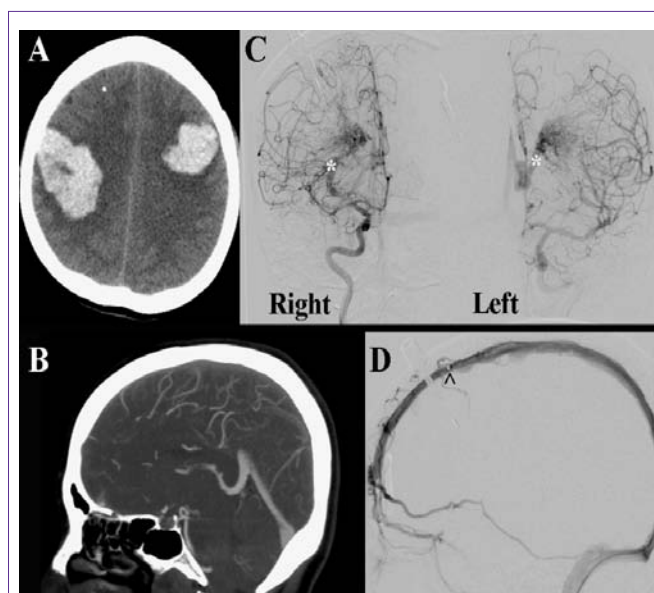


Figure 1: A) Bilateral hemorrhages suspicious for venous occlusion (axial CT) B) Absence of sagittal sinus filling (CTV). C) ICA injections demonstrating bilateral thalamic AVM with high flow features. (*ectatic venous drainage with arterial phase) D) Sagittal sinus patency as demonstrated by venous catheter (^ shows distal tines of catheter).