

Dural arteriovenous fistula and cerebral venous thrombosis

Fístula arteriovenosa dural e trombose venosa cerebral

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A 55-year-old man was admitted with Wernicke's aphasia and history of progressive headache in the past three weeks. Computed tomography showed a temporal lobar hemorrhage, transverse sinus thrombosis and suggested a dural arteriovenous fistula (DAF) (Figure 1). Digital subtraction angiography confirmed the DAF, which was successfully treated with embolization (Figure 2).

DAF is a rare abnormal connection between dural veins and dural or pachymeningeal branches of cerebral arteries. DAF was reported in 1.6% of patients diagnosed with CVT, which in turn causes 0.5-1% of all strokes^{1,2}. Prompt diagnosis of DAF in patients with CVT is crucial for appropriate treatment.

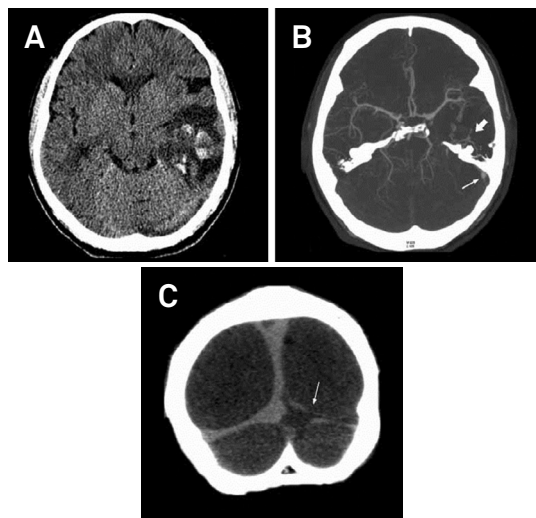


Figure 1. Hematoma in the left temporal lobe identified by computed tomography (CT) (A). CT angiography (CTA, arterial phase, B) showed a vascular structure and early enhancement inside the left sigmoid sinus (thick arrow), as well as serpiginous vessels in the middle cranial fossa (thin arrow). CTA (venous phase, C) showed venous thrombosis (arrow).

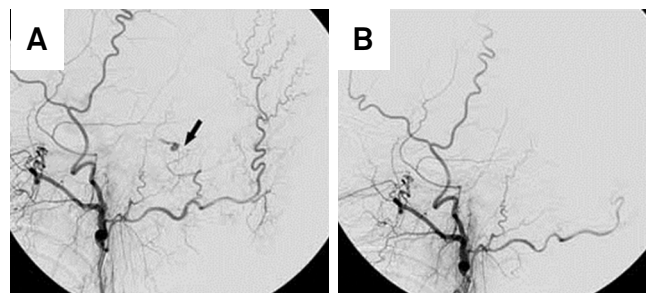


Figure 2. External carotid artery angiogram before (left) and after (right) embolization. Early filling of an intradural vein without a draining pathway (arrow, A) was no longer observed after treatment (B).

References

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