



Images

Isolated straight sinus thrombosis

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A woman in her 50s with history of breast cancer on Tamoxifen presented with altered mental status. Patient was unresponsive, had preserved pupillary light response with small pupils, and localized to noxious stimuli in upper extremities with triple flexion in the lower extremities.

2. What is the most likely diagnosis?

- A. Brain tumor
- B. Venous sinus thrombosis
- C. Dural arteriovenous fistula
- D. Basal ganglia calcification

3. Answer: Venous sinus thrombosis

A head CT was performed (Fig. 1A) and a CT venogram showed isolated straight sinus thrombosis. Heparin was initiated and patient was taken to the interventional neuroradiology suite. An attempted thrombectomy was unsuccessful (Fig. 1B). A brain MRI was performed 2 days later (Fig. 1C and D). Patient showed rapid neurological decline and expired 5 days later. Isolated straight sinus thrombosis is a rare condition associated with a very poor

prognosis [1]. Management include heparinization with a few reported cases of endovascular thrombolysis [2].

Conflict of interests

No conflict of interests by any of the authors.

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Competing interests statement

None.

References

- [1] Valeriano J, Bhagavatula K, Ku A, Snyder PJ. Isolated straight sinus thrombosis: clinical and neuroradiologic correlates. *J Neuroimaging* 1998;8:106–8.
- [2] Gerszten PC, Welch WC, Spearman MP, Jungreis CA, Redner RL. Isolated deep cerebral venous thrombosis treated by direct endovascular thrombolysis. *Surg Neurol* 1997;48:261–6.

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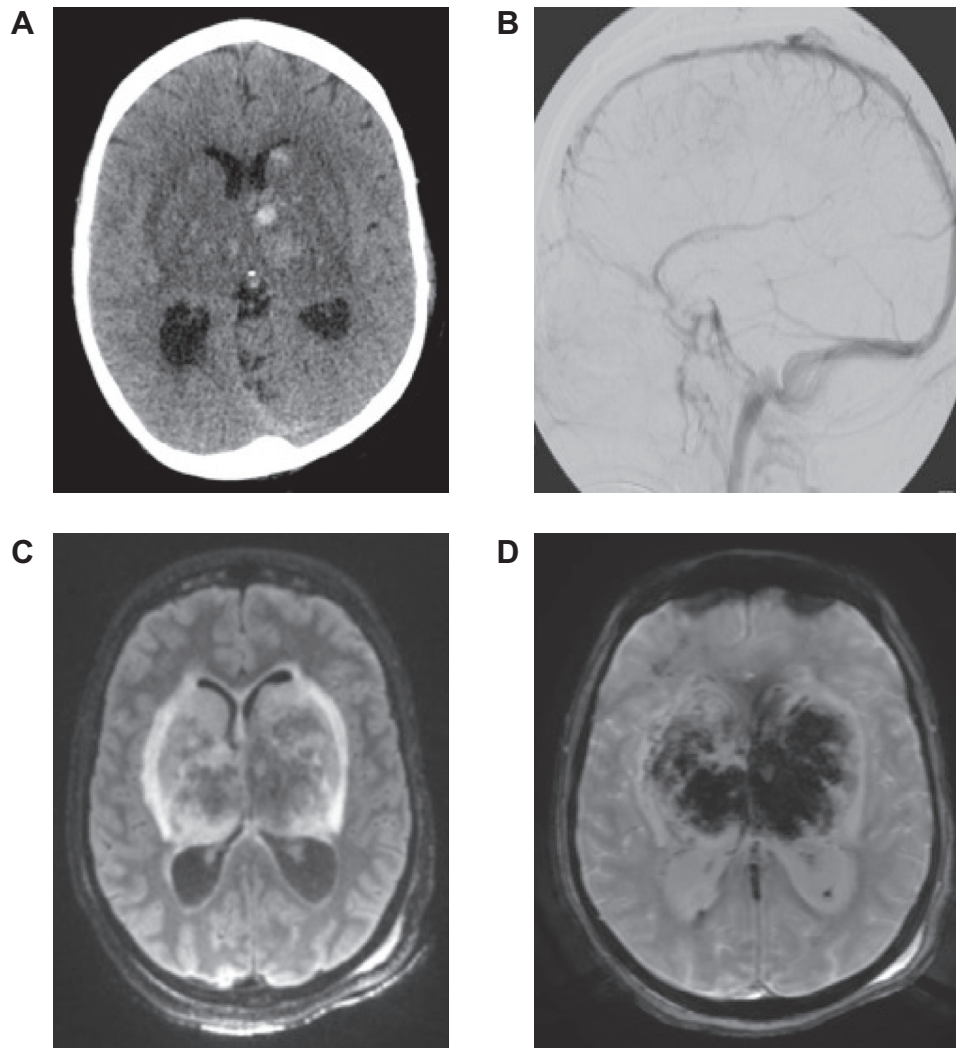


Fig. 1. A. Head CT showing hemorrhagic infarct of the basal ganglia and bilateral thalami. B. Angiogram showing absence of the straight sinus, inferior sagittal sinus, vein of Galen and internal cerebral veins. C. Axial T2-Flair MRI showing a mixture of cytotoxic and vasogenic edema and D. Axial SWI MRI showing extensive susceptibility involving the bilateral deep gray structures.