

Teaching NeuroImages: Mucormycosis-associated vasculitis

A new sequence to show an old invasive infection

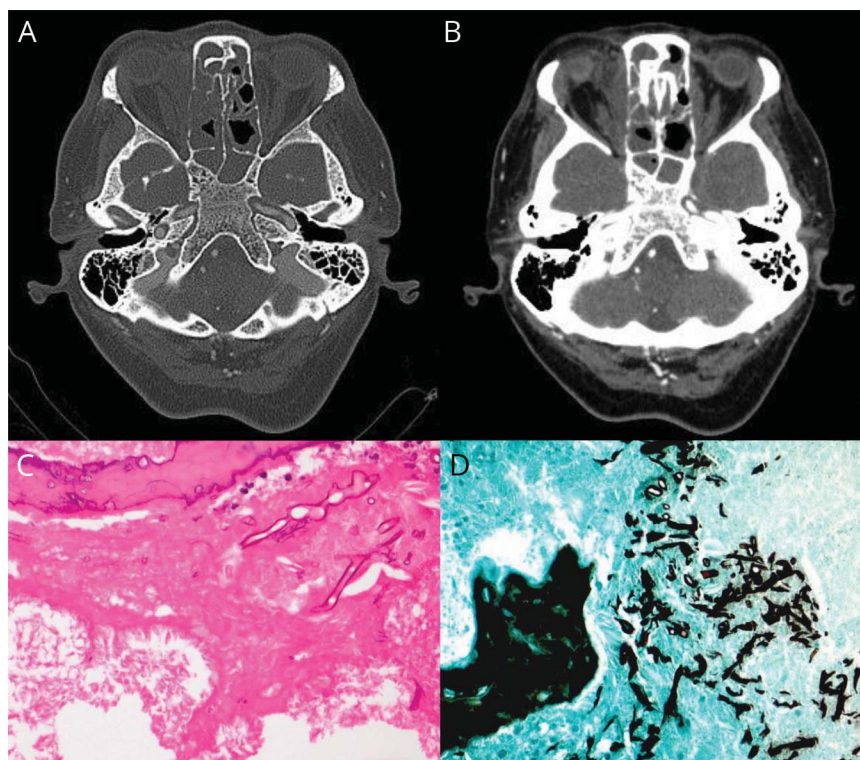
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Figure 1 Axial CT scan discloses soft tissue in ethmoidal cells and sphenoid sinus with erosion of lamina papyracea



(A, B) There is extension of inflammatory process to orbits. (C, D) Necrotic tissue invaded by large and nonseptate hyphae, consistent with mucormycosis (×40).

A diabetic 54-year-old woman with HIV infection presented headache, nasal discharge, and ophthalmoplegia for 1 month. CSF showed lymphocytic pleocytosis. CT disclosed invasive sinusopathy. Histopathologic analysis confirmed mucormycosis (figure 1). Angiography with high-resolution vessel wall imaging (HR-VWI) was performed (figure 2). She died despite surgical debridements and treatment with liposomal amphotericin B.

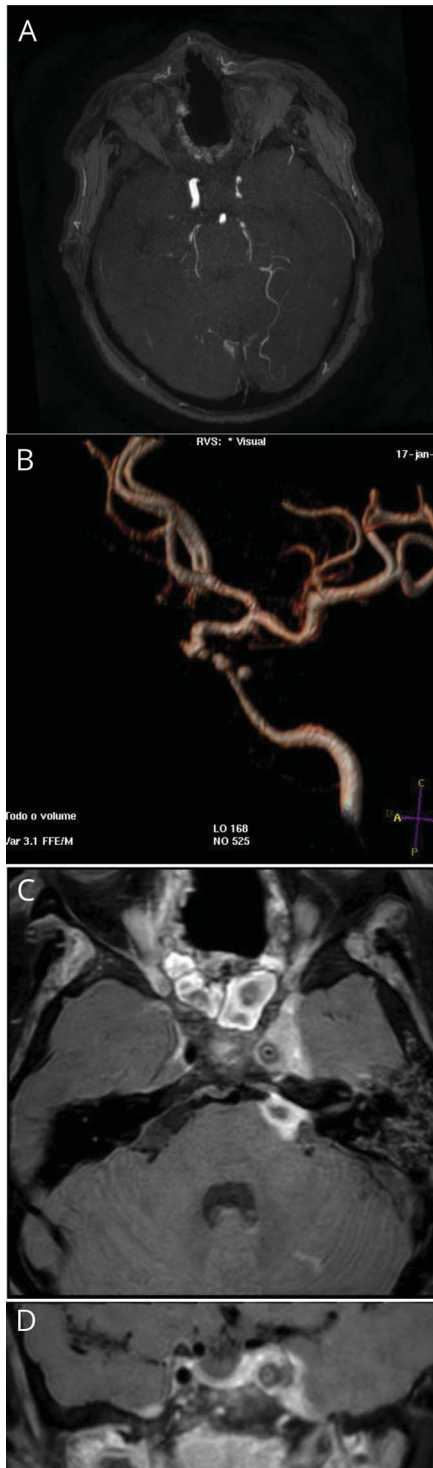
HR-VWI is useful in vasculitis evaluation due to its ability to demonstrate enhancement in the area of inflammation.^{1,2} In this case, smooth and concentric vessel wall enhancement related to

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Figure 2 3D time-of-flight magnetic resonance angiography and volume rendering reconstruction depict left carotid artery (LCA) stenosis and infectious pseudoaneurysms



(A, B) High-resolution vessel wall imaging postcontrast demonstrates a concentric thickening of LCA. There is inflammatory process in inner layer and probable area of necrosis in outer layer. There is also septic thrombosis in left cavernous sinus (C, D).

inflammation was observed. Further studies are required to determine the accuracy of this method for mucormycosis.

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Disclosure

The authors report no disclosures relevant to the manuscript. Go to Neurology.org/N for full disclosures.

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Name	Location	Role	Contribution
Laiison Feitoza, MD	State University of Campinas, São Paulo, Brazil	Author	Acquisition of data and writing the initial drafts of the manuscript
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Fabiano Reis, MD, PhD	State University of Campinas, São Paulo, Brazil	Author	Concept, acquisition of data, and critical revision of the manuscript for intellectual content

References

1. Lehman VT, Brinjikji W, Kallmes DF, et al. Clinical interpretation of high-resolution vessel wall MRI of intracranial arterial diseases. *Br J Radiol* 2016;89:1–7.
2. Edjlali M, Gentic JC, Régent-Rodriguez C, et al. Does aneurysmal wall enhancement on vessel wall MRI Help to distinguish stable from unstable intracranial aneurysms? *Stroke* 2014;45:3704–3706.

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