Teaching NeuroImages: Aspergillosis-induced vasculitis presenting as ischemic stroke in an immunocompetent patient

David Lebeaux, MD, PhD, Isabelle Klein, MD, PhD, Gabriel Garcia, MD, Fabrice Bruneel, MD, Fernando Pico, MD, PhD, and Olivier Lortholary, MD, PhD

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Correspondence

Dr. Lebeaux
david.lebeaux@aphp.fr

Figure Acute ischemia secondary to internal carotid stenosis caused by a perivascular infiltrative enhancing mass

(A) Acute ischemia on diffusion-weighted imaging in the left lentiform and caudate nucleus. (B) Time-of-flight magnetic resonance angiography: high-grade stenosis of the internal carotid with subsequent low flow. (C-E) Postcontrast T1-weighted MRI: perivascular infiltrative enhancing mass (C) at diagnosis and after (D) 7 and (E) 15 months of therapy.

A 56-year-old immunocompetent man had surgery for pansinusitis; culture grew *Aspergillus fumigatus*. Two months later, he suddenly experienced febrile right-sided hemiplegia. Brain MRI revealed a recent infarction of the left lentiform and caudate nucleus (figure, A) with left internal carotid and middle cerebral arteries stenosis (figure, B) caused by a perivascular infiltrative mass (figure, C). CSF analysis revealed lymphocytic meningitis and β -D-glucans levels of 190 pg/mL (negative in serum). MRI worsened despite voriconazole followed by voriconazole/caspofungin (figure, D) but improved with caspofungin and liposomal amphotericin B during 15 months (figure, E). Cerebral aspergillosis-related vasculitis has been rarely reported.^{1,2}

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Author contributions

D. Lebeaux: drafting/revising the manuscript, data acquisition, study concept or design, analysis or interpretation of data, accepts responsibility for conduct of research and final approval, acquisition of data. I. Klein: analysis or interpretation of data, accepts responsibility for conduct

From Centre d'Infectiologie Necker-Pasteur and Institut Imagine (D.L., O.L.), Hôpital Necker Enfants Malades, Assistance Publique-Hôpitaux de Paris, Sorbonne Paris Cité, Université Paris Descartes; Neuroimaging Department (I.K.), Clinique Allera-Labrouste, Paris; Department of Diagnostic Radiology (G.G.), Gustave Roussy, Villejuif; and Critical Care Unit, Department of Neurology, and Stroke Center (F.P.), Versailles Saint Quentin en Yvelines University, Versailles Hospital, France. D.L. is currently affiliated with the Hôpital Européen Georges Pompidou, Unité Mobile de Microbiologie Clinique, Service de Microbiologie, AP-HP, Sorbonne Paris Cité, Université Paris Descartes, France.

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of research and final approval, acquisition of data. G. Garcia: drafting/revising the manuscript, analysis or interpretation of data, accepts responsibility for conduct of research and final approval, acquisition of data. F. Bruneel: drafting/revising the manuscript, accepts responsibility for conduct of research and final approval. F. Pico: data acquisition, study concept or design, analysis or interpretation of data, accepts responsibility for conduct of research and final approval, acquisition of data, study supervision. O. Lortholary: drafting/revising the manuscript, data acquisition, study concept or design, accepts responsibility for conduct of research and final approval, acquisition of data, study supervision.

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