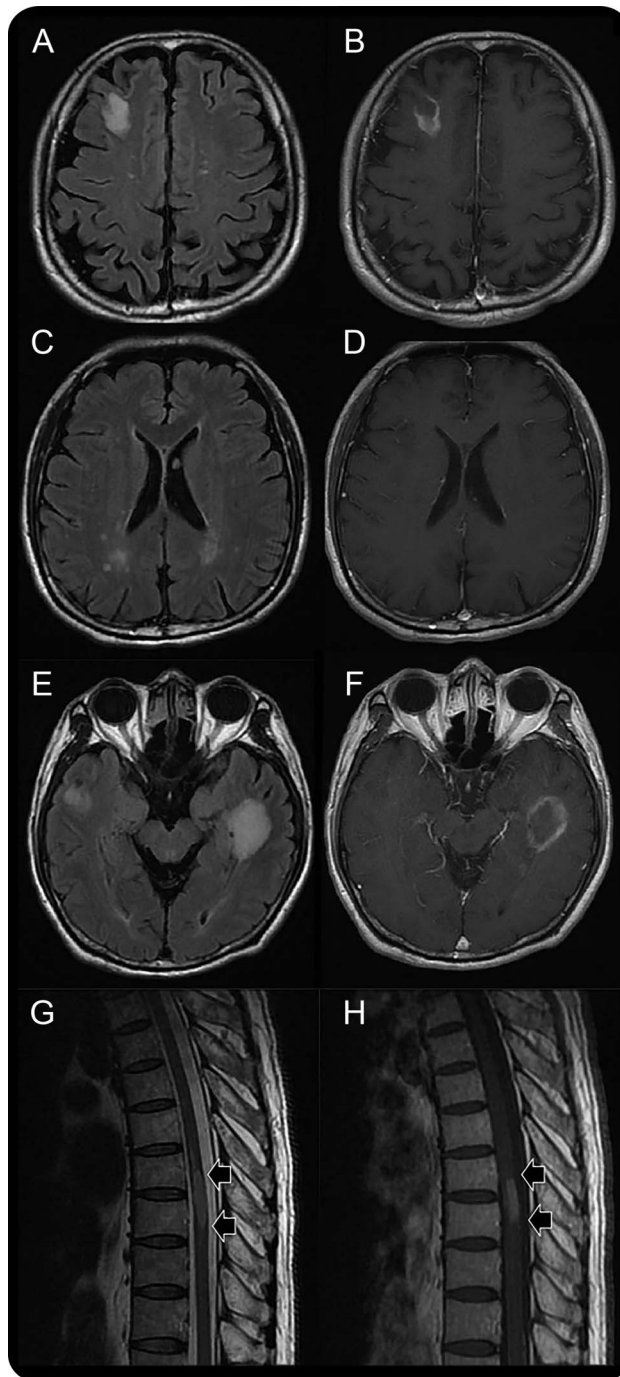
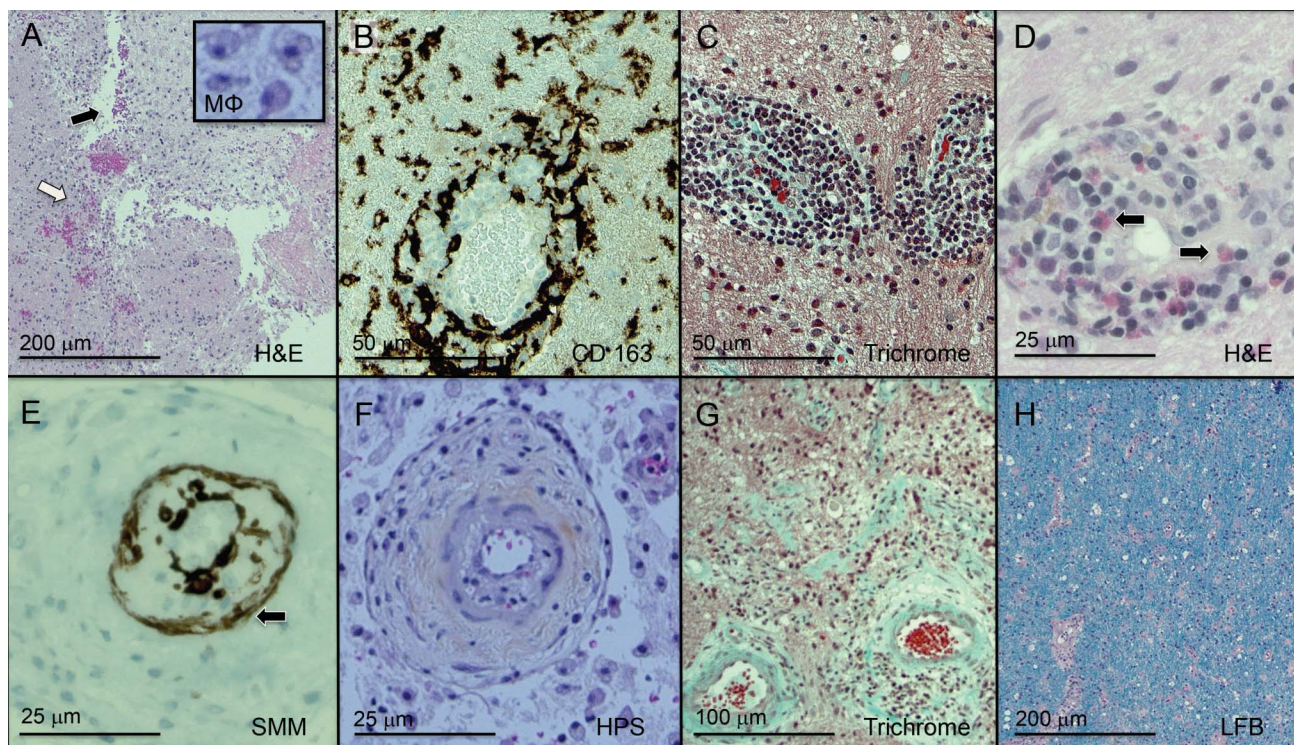


Eosinophilic CNS vasculitis can mimic demyelinating disease of the brain and spinal cord

Figure 1 MRI of the brain and spinal cord



Juxtacortical and periventricular (A, C, E) T2 hyperintensities with varying degrees of enhancement (B, D, F). Note T2 hyperintensity at T7-T10 with edema (G, arrows) and gadolinium enhancement (H, arrows).



(A, hematoxylin & eosin) Vasculitis (black arrow), infarcts (white arrow), inset with macrophages. Transmurular infiltration by macrophages (B, CD163), lymphocytes, polymorphonuclear leukocytes (C, trichrome), and numerous eosinophils (D, arrows, hematoxylin & eosin), destroying the vessel wall (E, arrow, smooth muscle myosin). (F, hematoxylin phloxine saffron; G, trichrome) Chronic, scarring phase. (H) Minimal perivascular myelin loss.

A 61-year-old man developed progressive ascending sensory loss to T8 and paraparesis over 4 weeks. MRI revealed ovoid T2-hyperintense lesions in juxtacortical and periventricular areas, and in the T7-T10 spinal segment, with varying degrees of peripheral gadolinium enhancement (figure 1). He received 5 days of high-dose corticosteroids and plasmapheresis for presumed demyelination, without clinical response. Brain biopsy showed vasculitis involving small arteries with transmural inflammatory cell infiltrates including numerous eosinophils (figure 2). Eosinophilic vasculitis can cause ischemic strokes¹; it rarely involves the spinal cord.² Our case illustrates that it should be considered in the differential diagnosis of CNS demyelination.

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1. Sommerville RB, Noble JM, Vonsattel JP, Delapaz R, Wright CB. Eosinophilic vasculitis in an isolated central nervous system distribution. *BMJ Case Rep* 2009;2009.
2. Na SJ, Lee KO, Ko JH. Eosinophilic vasculitis of the spinal cord associated with Churg-Strauss syndrome. *J Neurol Sci* 2010; 295:107–109.

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