Teaching NeuroImages: Multifocal cerebral infarcts as a presentation of idiopathic hypereosinophilic syndrome

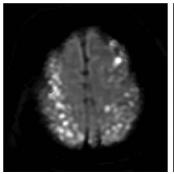
Andrea Wasilewski, MD

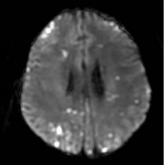
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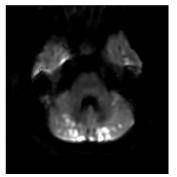
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Figure Axial diffusion-weighted brain MRI







Axial diffusion-weighted MRI shows numerous punctate foci of diffusion restriction in the bilateral cerebral and cerebellar hemispheres, consistent with infarction.

A 56-year-old immunocompetent woman presented with severe headaches and encephalopathy. Brain MRI showed numerous punctate infarcts throughout the cerebral and cerebellar hemispheres (figure). White blood cell count was 185,000, of which 97% were eosinophils. Infectious and neoplastic evaluations, including CSF and bone marrow analysis, were unremarkable. The course was complicated by eosinophilic pneumonia, myocardial infarction, and deep venous thrombosis. Endocardial fibrosis was absent. Idiopathic hypereosinophilic syndrome (IHES) was diagnosed. IHES is a leukoproliferative disorder causing multiorgan damage. Diagnosis requires marked peripheral eosinophilia and exclusion of infection, hematologic malignancy, and vasculitis. Infarcts in IHES occur due to microvascular occlusion in watershed regions. 1,2

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Disclosure

A. Wasilewski reports no disclosures relevant to the manuscript. Go to Neurology.org/N for full disclosures.

References

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