Teaching NeuroImages:

Granulomatous angiitis of the CNS associated with Hodgkin lymphoma

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Figure 1 Radiologic and histopathologic findings of the CNS lesions

(A, B) Axial and coronal postgadolinium T1-weighted imaging demonstrates extensive hemispheric and focal cerebellar abnormalities with a perivascular pattern of enhancement; (C) MRI perfusion imaging demonstrates decreased cerebral blood flow in the white matter; (D) hematoxylin & eosin section demonstrates necrotizing granulomatous angiitis.

A 37-year-old man presented with progressive gait ataxia for 2 weeks. He also complained of right neck tumefaction and general malaise for 1 month. His prior medical history included hypertension, depression, polysubstance abuse, and 1 year of mild short-term memory complaints. His Mini-Mental State Examination score was 26/30; he had mild left hemiparesis, and ataxia of the limbs, trunk, and gait. CSF examination showed protein 78 mg/dL, glucose 52 mg/dL, nucleated cell count 42 (87% lymphocytes, 13% monocytes); cytology, JC virus, and varicella zoster virus

PCR were negative. Brain MRI, neck PET, and right cervical lymph node and frontal stereotactic brain biopsy (figures 1 and 2) were consistent with granulomatous angiitis of the CNS associated with Hodgkin lymphoma.^{1,2}

AUTHOR CONTRIBUTIONS

Dr. Fuehrer: drafting/revising the manuscript, contribution of vital reagents/tools/patients, acquisition of data. Dr. Hammack: drafting/revising the manuscript, study supervision. Dr. Morris: drafting/revising the manuscript, analysis or interpretation of data, acquisition of data, study supervision. Dr. Kaufmann: drafting/revising the manuscript, analysis or interpretation of data. Dr. Giannini: drafting/

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Figure 2 PET and histopathologic findings of the neck lesion

(A) Hypermetabolic conglomerate lymph node mass right neck; (B) nodular sclerosing Hodgkin lymphoma with classic multinucleated Reed-Sternberg cell (inset: CD30-positive Hodgkin cells).

revising the manuscript, study concept or design, acquisition of data, study supervision.

DISCLOSURE

Dr. Fuehrer, Dr. Hammack, and Dr. Morris report no disclosures. Dr. Kaufmann serves on the editorial board of the *American Journal of Neuroradiology*. Dr. Giannini receives research support from the NIH.

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