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【 PICTURES IN CLINICAL MEDICINE 】

Central Nervous System Lymphoma Masquerading as Neurosarcoidosis

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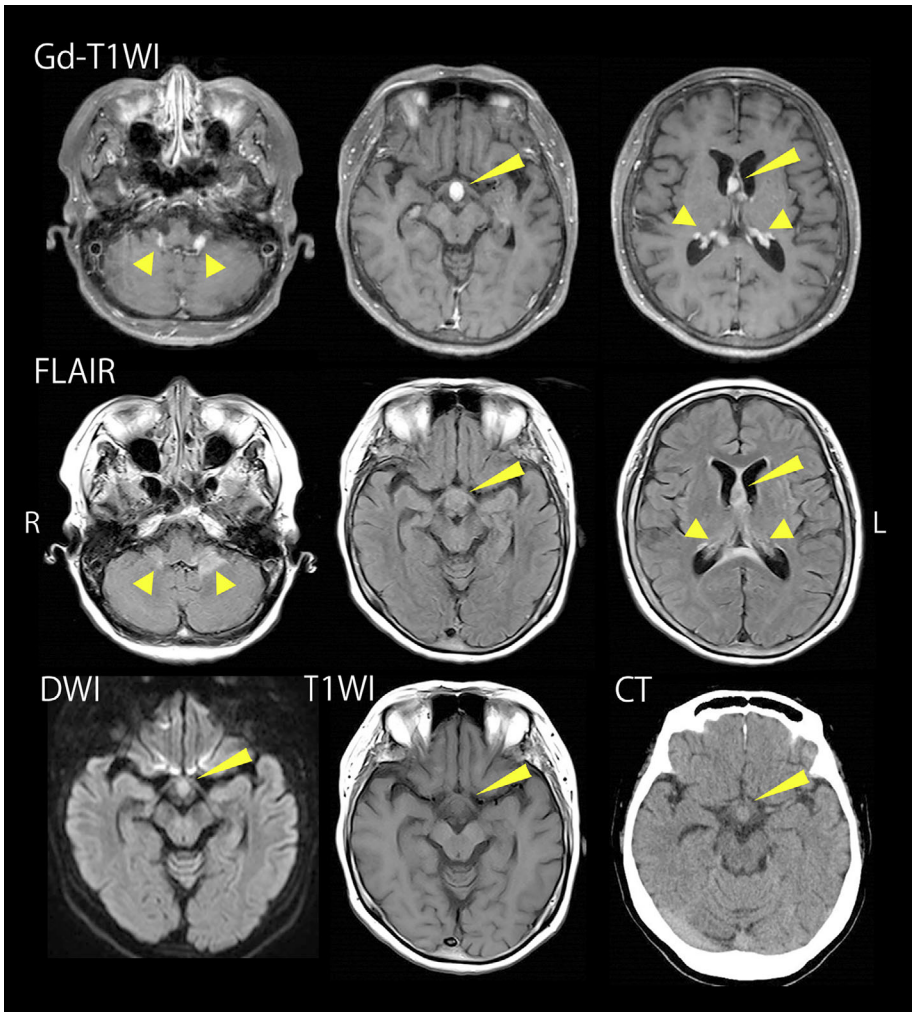

Picture 1.

A 72-year-old woman with a history of pulmonary sarcoidosis was admitted with progressive cognitive decline, gait abnormality, headache, somnolence, and anorexia. Post-contrast-enhanced brain magnetic resonance imaging revealed uniformly enhanced masses measuring 5-6 mm in diameter in the bilateral cerebellar peduncles and suprasellar

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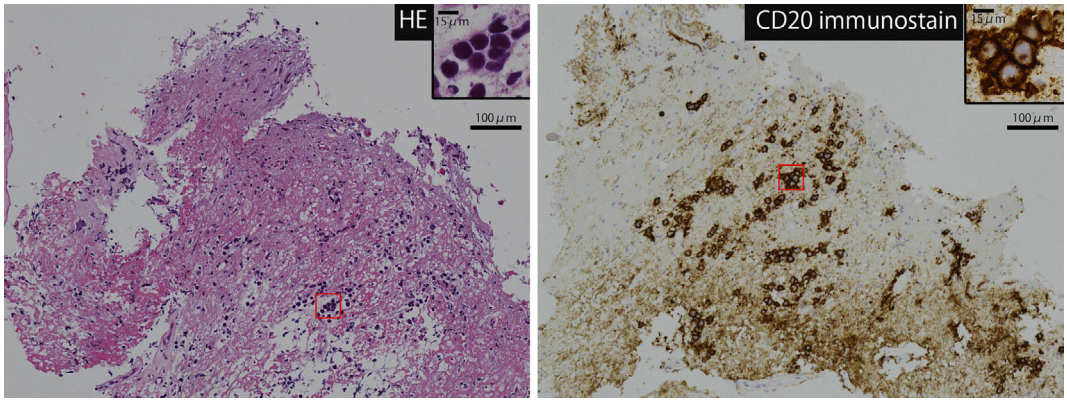

Picture 2.

and periventricular lesions. These masses were isointense on fluid-attenuated inversion recovery, slightly hyperintense on diffusion-weighted images, hypointense on T1-weighted imaging, and normodense on brain computed tomography (Picture 1). A serum examination revealed a decreased sodium level (125 mEq/L) but otherwise normal findings, including antidiuretic hormone levels. A cerebrospinal fluid (CSF) examination revealed elevated values for protein (163 mg/dL) and slightly elevated cell counts (9/μL). Serum and CSF angiotensin-converting enzyme and soluble interleukin-2 receptor levels were within normal limits. The CSF cytology was class 1. Although these findings were compatible with neurosarcoidosis, we were unable to completely exclude the possibility of primary central nervous system lymphoma (PCNSL). After performing 1 course of intravenous methylprednisolone therapy (1,000 mg/day for 3 days), we performed a neuroendoscopic brain biopsy. Oral prednisolone therapy (1 mg/kg/day) was then introduced. The masses first seemed to shrink but then grew again. CSF cytology revealed a class III lesion. The biopsy specimen was first diagnosed as unspecific and then revealed to consist of large, atypical CD20-positive lymphocytes, leading to a diagnosis of PCNSL (Picture 2). The patient received chemotherapy with high-dose methotrexate with rituximab and survived for over one year. The increased incidence of lymphoma in patients with sarcoidosis has been described as "sarcoidosis-lymphoma syndrome" (1); however, coincident PCNSL is quite rare (2), and PCNSL in the suprasellar lesion has not been reported. This case highlights the importance of considering PCNSL as a differential diagnosis for multiple mass lesions in the suprasellar lesion.

The authors state that they have no Conflict of Interest (COI).

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