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Neuro *Images*

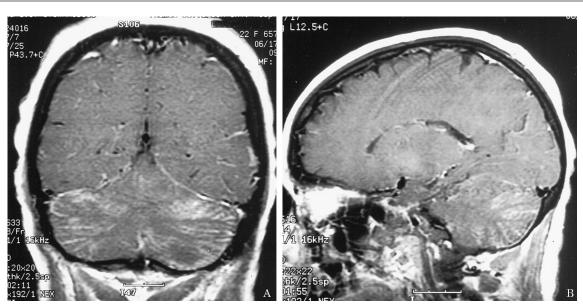


Figure. Coronal and sagittal sections of brain MRI after gadolinium administration. Both demonstrate moderately extensive abnormal leptomeningeal enhancement in the posterior fossa and subtle increased enhancement in the leptomeninges of the supratentorial brain. The cerebellum looks swollen.

Acute cerebellitis: MRI findings

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A 22-year-old woman with a history of sickle cell disease presented with a throbbing holocranial headache, fever, and chills. The headache was associated with photophobia, nausea, and neck stiffness. There was no evidence of meningismus.

Neurologic examination was significant for wide-based unsteady gait with mild ataxia. There was no dysmetria or ataxic dysarthria. Laboratory evaluation demonstrated an elevated serum white count with shift. CSF examination showed a lymphocytic pleocytosis with elevated total protein, normal glucose, and negative Gram stain and bacterial cultures, suggestive of an aseptic or viral meningitis.

CT of the brain at admission demonstrated hydrocephalus. MRI of the brain revealed cerebellar swelling. Postgadolinium administration, there was bilateral cerebellar enhancement with only mild supratentorial enhancement (figure), suggesting an inflammatory process strictly involving the cerebellum.

A clinical diagnosis of acute cerebellitis was made, most likely viral induced, as no systemic infection (blood and urine cultures were negative) was found. Her symptoms improved with fluid hydration and no antibiotics. A follow-up MRI was suggested but not completed.

Abnormal bilateral cerebellar enhancement on MRI has been documented in one other case of acute cerebellitis. 1 It appears that cerebellar enhancement on MRI may be a specific imaging test for acute cerebellitis.

^{1.} Bakshi R, Bates VE, Kinkel PR, Mechtlee LL, Kinkel WR. Magnetic resonance imaging findings in acute cerebellitis. Clin Imaging 1998;22: 79 - 85.



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