

[PICTURES IN CLINICAL MEDICINE]

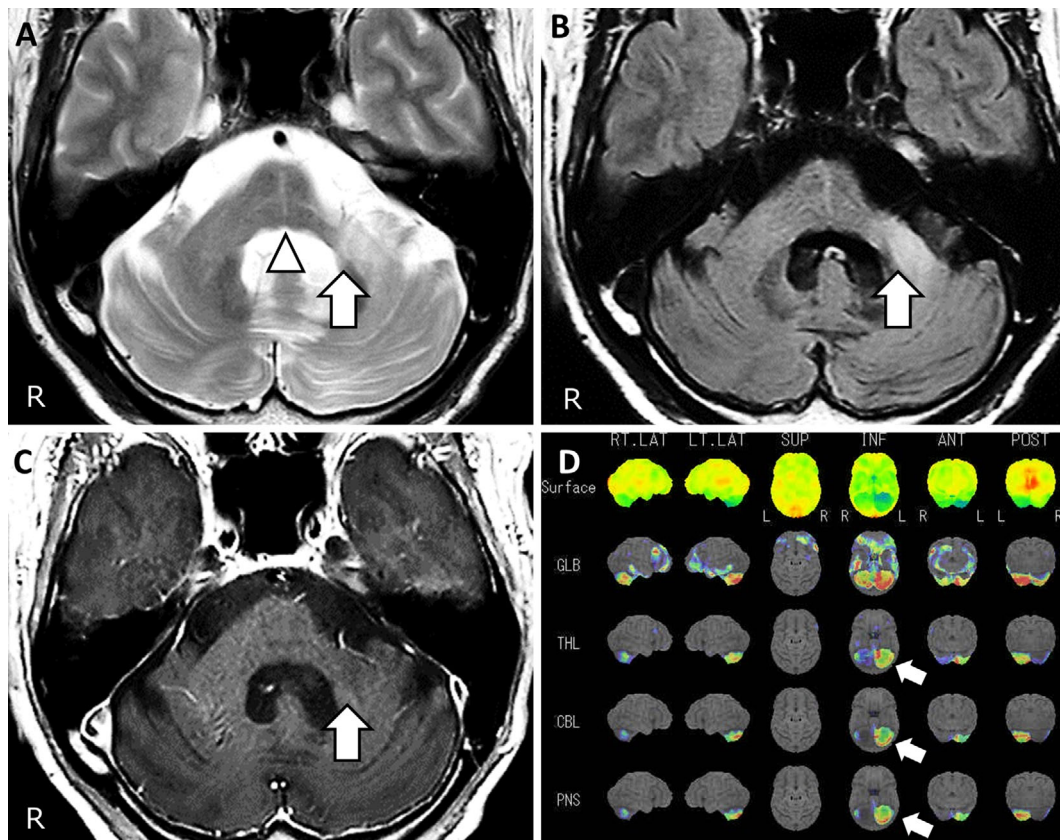
A Unilateral Bright Middle Cerebellar Peduncle Sign

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Key words: bright middle cerebellar peduncle sign, hot cross bun sign, multiple system atrophy

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Picture.

A 62-year-old previously healthy Japanese male presented with a 1-year history of progressive dizziness. He had gaze-evoked nystagmus, scanning speech, left hemiataxia, tandem gait instability, and erectile dysfunction. He had no family history of ataxia. Cerebral magnetic resonance imaging demonstrated hyperintensity in the left middle cerebellar peduncle (MCP) on T2 and fluid-attenuated inversion recovery sequences (Picture A, B, arrows). The lesion showed no gadolinium contrast enhancement (Picture C). No abnormality was found in the putamen. Single-photon emission com-

puted tomography showed a decreased blood flow in the left hemocerebellum (Picture D). The differential diagnosis included glioma, lymphoma, JC virus granule cell neuronopathy, and demyelinating disease. However, the combination of the hot cross bun sign in the pons (Picture A, arrowhead) and a bright MCP sign led to a diagnosis of cerebellar-type multiple system atrophy (1). A bright MCP sign indicates degeneration and volume loss in the peduncle (1). Some patients with multiple system atrophy show marked clinical and pathological laterality (2). Our case showed a unilateral

bright MCP sign, which might mimic either malignancy or demyelinating disease.

The author states that he has no Conflict of Interest (COI).

References

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