Teaching Video NeuroImages: Upbeat and horizontal gaze-evoked nystagmus in bilateral medial medullary infarction

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Figure Initial and follow-up MRIs

(A) Diffusion-weighted images obtained 6 hours after symptom onset show an equivocal hyperintensity in the rostral medial medulla oblongata. (B) Follow-up images obtained 2 days later exhibit a heart appearance sign extending to the dorsal medulla.

A 41-year-old man with progressive quadriparesis and generalized tingling sensation showed spontaneous upbeat nystagmus and horizontal gaze-evoked nystagmus (video at Neurology.org). The initial diffusion-weighted images showed an equivocal hyperintensity at midline of rostral medulla (upper row). Follow-up MRIs (lower row) showed characteristic heart appearance sign (figure).

Since motor weakness can be progressively presented and the MRI findings can be equivocal in the acute stage of bilateral medial medullary infarction,¹ patients who have progressive quadriplegia with normal consciousness may be misdiagnosed with Guillain-Barre syndrome or its variants.² The nystagmus suggesting a central origin may be helpful for early diagnosis in this setting.

AUTHOR CONTRIBUTIONS

E.-S. Lee, as the first author, contributed to analysis and interpretation of the data and drafting of the manuscript. K.-B. Sung contributed

to interpretation of the data and critical revision of the manuscript. T.-K. Lee, as the corresponding author, contributed to design of the study, interpretation of the data, and critical revision of the manuscript.

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DISCLOSURE

The authors report no disclosures relevant to the manuscript. Go to Neurology.org for full disclosures.

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Supplemental data
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