Culmen Infarct Triggers Isolated Body Backpulsion

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Picture 1. (A) Axial, (B) sagittal and (C) coronal sections of fluid-attenuated inversion imaging showing hyperintensity signal areas in the culmen of the rostral vermis.

A 62-year-old man with dyslipidemia who was a heavy smoker suddenly developed unsteadiness. Neurological examination showed an inability to sit and stand due to backward falling without other neurological signs. Brain MRI revealed selective lesions in the culmen of the rostral vermis (Picture 1A to 1C). Brain MR angiography and cerebral angiography disclosed no pathognomonic changes. He improved during the following 6 days.

Isolated truncal ataxia is rarely reported in patients with rostral vermis infarct (1, 2).

Anatomically speaking, the rostral vermis is divided into Larsell's lobules I (lingula) to VI (culmen) region. The rostral vermis controls posture and receives fibers from the dorsal spinocerebellar tract. The medial branch of the superior cerebellar artery supplies the rostral vermis (3). Previous causative lesions of truncal ataxia have been focused on Larsell's lobule II (centralis) (1, 2). The present unique case indicates that culmen infarct can elicit isolated body backpulsion.

References

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