Vibration-induced reversal of spontaneous nystagmus in lateral medullary infarction

Figure Acute lateral medullary infarction

Brain MRI shows an acute infarct (thin arrows) in the left lateral medulla on diffusion-weighted imaging (A) and fluid-attenuated inversion recovery (B). There are also multiple old infarcts (thick arrows) in the left cerebellar hemisphere.

A 68-year-old man developed vertigo with a lateral medullary syndrome (figure). Right-beating nystagmus, seen under Frenzel lenses, reversed when a vibrator (60 Hz) was applied on either sternocleidomastoid muscle or either mastoid. When the vibrator was turned off, the nystagmus returned to right-beating (video on the *Neurology*® Web site at www.neurology.org).

Vibration-induced nystagmus, usually beating toward the intact side, is seen in unilateral peripheral vestibulopathy.¹ We describe a patient with lateral medullary infarction in whom vibration reversed the spontaneous nystagmus, a pattern differing from that typically seen with peripheral lesions.² This finding implies that a central vestibular nystagmus may be altered by labyrinthine or nuchal proprioceptive stimulation.

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