Vibration-induced reversal of spontaneous nystagmus in lateral medullary infarction

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 proprioceptic stimulation.

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Acknowledgment: The authors thank Prof. David Zee for critically reviewing the manuscript.

Study funding: No targeted funding reported.

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

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*Neurology* 2013;80;1353
DOI 10.1212/WNL.0b013e31828ab336

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