VIDEO NEUROIMAGES

Vestibular paroxysmia presenting with irritative nystagmus

Allison S. Young, MAud, Benjamin Jonker, FRACS, and Miriam S. Welgampola, PhD

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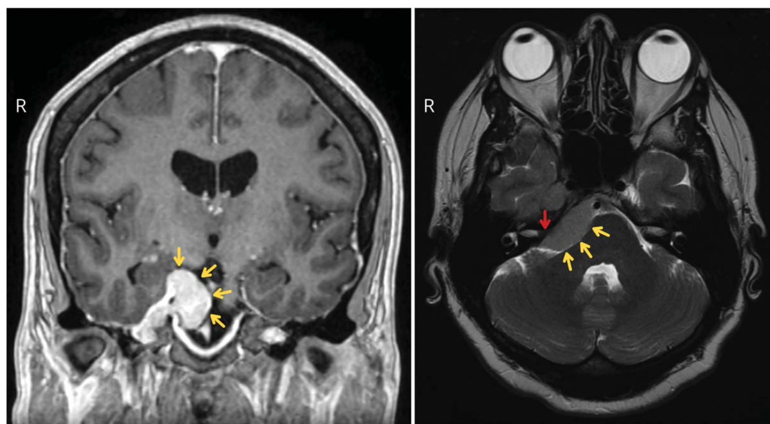
Correspondence
Dr. Welgampola
miriam@icn.usyd.edu.au

Figure 1 MRI brain



Postcontrast T1 coronal/axial MRI: right petroclival meningioma (13 × 32 mm), abutting the right vestibulocochlear nerve causing brainstem compression.

A 54-year-old woman with a large right petroclival meningioma (figure 1) reported spontaneous spinning vertigo, oscillopsia, and right-sided "clicking" tinnitus lasting 5–30 seconds, recurring every 5–10 minutes. Examination with video-Frenzel goggles revealed flurries of spontaneous right-beating, horizontal-torsional (irritative) nystagmus, time-locked with vertigo (video 1). Hearing was symmetrical with right vestibular hypofunction affecting all 3 semicircular canals and the saccule (figure 2). Vestibular paroxysmia was diagnosed and carbamazepine 100 mg BD was prescribed. The patient was asymptomatic at 4 weeks. Eighth cranial nerve neurovascular cross-compression may cause vestibular paroxysmia characterized by brief spells of spontaneous and positional vertigo associated with unilateral audiovestibular deficits.[1,2]

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Video

Author contributions

Allison Young: acquisition of data, original figure illustrations, revised and approved the manuscript for intellectual content. Benjamin Jonker: acquisition of data, reviewed the clinical case, revised and approved the manuscript for intellectual content. Miriam Welgampola: acquisition of data, reviewed the clinical case, revised and approved the manuscript for intellectual content.

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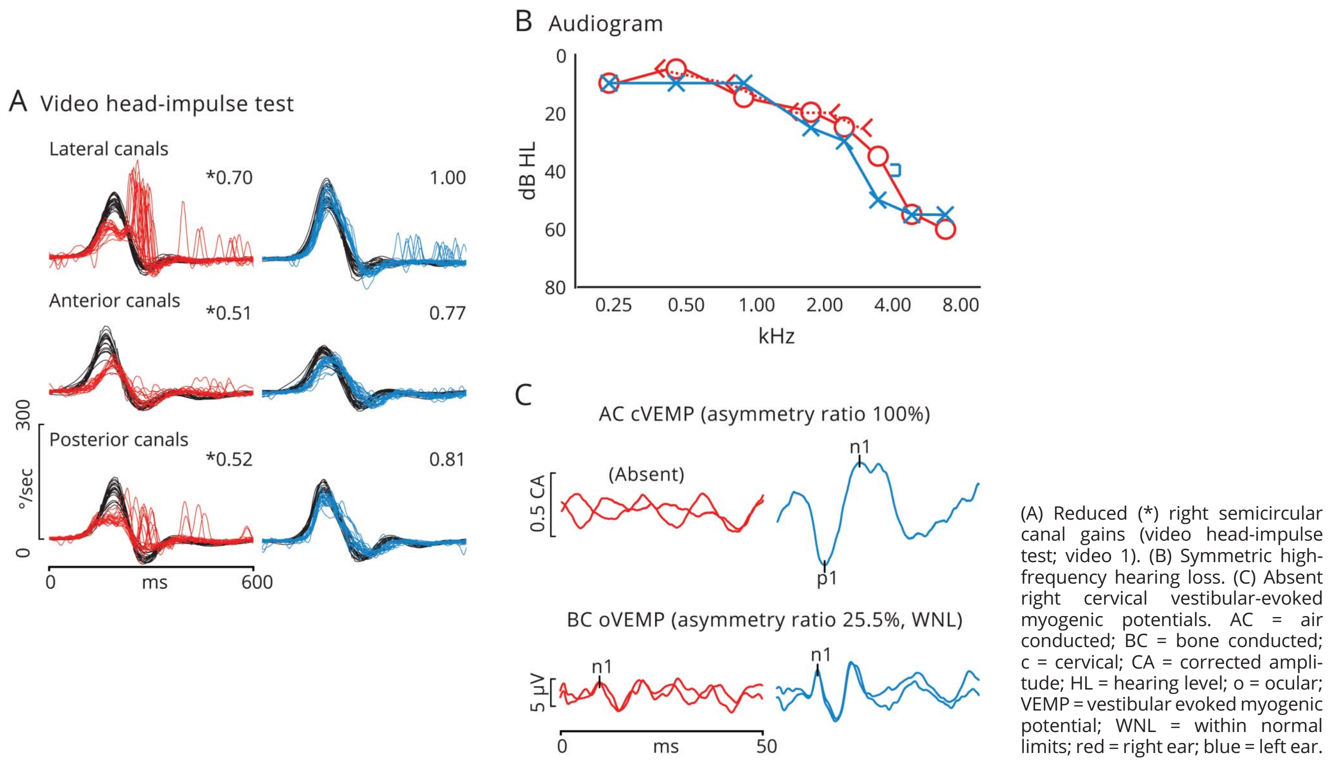
Figure 2 Audiovestibular test results



(A) Reduced (*) right semicircular canal gains (video head-impulse test; video 1). (B) Symmetric high-frequency hearing loss. (C) Absent right cervical vestibular-evoked myogenic potentials. AC = air conducted; BC = bone conducted; c = cervical; CA = corrected amplitude; HL = hearing level; o = ocular; VEMP = vestibular evoked myogenic potential; WNL = within normal limits; red = right ear; blue = left ear.

funding sources have no role in any aspect of the study or the decision to submit for publication.

Disclosure

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

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