Pulse-synchronous pendular nystagmus following cholesteatoma surgery

Figure CT scan of the perilymph fistula

Cranial CT scan shows the left temporal bone at the level of the horizontal semicircular canal after cholesteatoma removal. Arrow points to perilymph fistula.

A 33-year-old woman developed nausea, vertigo, and oscillopsia immediately after surgery for a left ear cholesteatoma. Vertigo increased during Valsalva maneuver. Neurologic examination showed a pulse-synchronous pendular nystagmus (video on the *Neurology*[®] Web site at Neurology.org) and postural imbalance. Cerebral MRI was inconspicuous. CT disclosed a discontinuity of the temporal bone lateral to the left horizontal semicircular canal, compatible with perilymph fistula (figure). After revision surgery, the symptoms disappeared. Acquired pendular nystagmus is a neuro-ophthalmologic finding that is almost exclusively caused by CNS disorders.¹ However, occurrence with postsurgical perilymph fistula has been reported.² Pulse-synchronicity of ocular oscillations may help to identify peripheral causes.

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**Supplemental data
at Neurology.org**

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