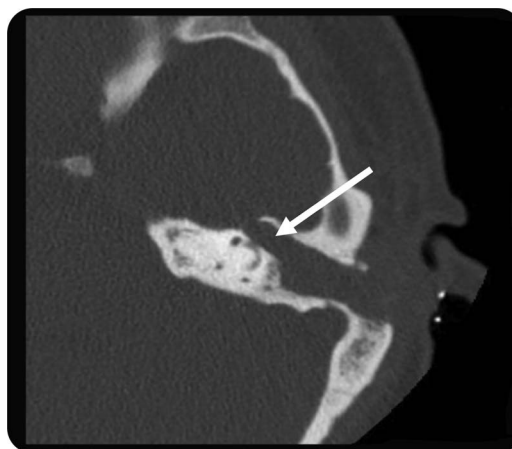


Pulse-synchronous pendular nystagmus following cholesteatoma surgery



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.

Kaspar-Josche Streitberger, MD, Martin Khan, MD, Christoph J. Ploner, MD

From Charité-Universitätsmedizin Berlin, Germany.

Author contributions: Dr. Streitberger was responsible for the following points: study concept and design, acquisition of data, analysis and interpretation, critical revision of the manuscript for important intellectual content. Dr. Khan was responsible for the following points: acquisition of data, critical revision of the manuscript for important intellectual content. Prof. Ploner was responsible for the following points: study concept and design, acquisition of data, analysis and interpretation, critical revision of the manuscript for important intellectual content, study supervision.

Study funding: No targeted funding reported.

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

Correspondence to Dr. Ploner: christoph.ploner@charite.de

Supplemental data
at Neurology.org

1. Leigh R, Zee D. *The Neurology of Eye Movements*. New York: Oxford University Press; 2006.
2. Rambold H, Heide W, Sprenger A, et al. Perilymph fistula associated with pulse-synchronous eye oscillations. *Neurology* 2001; 65:1769–1771.

Neurology®

Pulse-synchronous pendular nystagmus following cholesteatoma surgery

Kaspar-Josche Streitberger, Martin Khan and Christoph J. Ploner

Neurology 2015;85;109

DOI 10.1212/WNL.0000000000001710

This information is current as of July 6, 2015

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/85/1/109.full
Supplementary Material	Supplementary material can be found at: http://n.neurology.org/content/suppl/2015/07/03/WNL.000000000001710.DC1
References	This article cites 1 articles, 0 of which you can access for free at: http://n.neurology.org/content/85/1/109.full#ref-list-1
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): Nystagmus http://n.neurology.org/cgi/collection/nystagmus Oscillopsia http://n.neurology.org/cgi/collection/oscillopsia Vertigo http://n.neurology.org/cgi/collection/vertigo
Permissions & Licensing	Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at: http://www.neurology.org/about/about_the_journal#permissions
Reprints	Information about ordering reprints can be found online: http://n.neurology.org/subscribers/advertise

Neurology® is the official journal of the American Academy of Neurology. Published continuously since 1951, it is now a weekly with 48 issues per year. Copyright © 2015 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.

