A 44-year-old man with neurofibromatosis type 1 had been aware that his right eye pulsed. His visual acuity was 20/15 in both eyes and his intraocular pressures were normal. He had 4 mm of right exophthalmos and there was pulsesynchronous pulsation of the right eye (video on the Neurology® Web site at www.neurology.org). No bruit was heard. Lisch nodules were present on both irides. CT showed a large osseous defect of the greater wing of the right sphenoid bone. The differential diagnosis of pulsatile proptosis includes absence of the sphenoid wing in patients with neurofibromatosis 1,1 carotid-cavernous fistula, orbital roof fractures, and arteriovenous malformations.2

AUTHOR CONTRIBUTIONS
Thanos Papakostas: drafting/revising the manuscript, study concept or design, analysis or interpretation of data, accepts responsibility for conduct of research and final approval, acquisition of data. Simmons Lessell: drafting/revising the manuscript, study concept or design, analysis or interpretation of data, accepts responsibility for conduct of research and final approval.

STUDY FUNDING
No targeted funding reported.

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

REFERENCES
Teaching Video NeuroImages: Pulsatile proptosis
Thanos D. Papakostas and Simmons Lessell
Neurology 2013;81:e160
DOI 10.1212/01.wnl.0000436066.35760.24

This information is current as of November 18, 2013

Updated Information & Services
including high resolution figures, can be found at:
http://n.neurology.org/content/81/21/e160.full

Supplementary Material
Supplementary material can be found at:
http://n.neurology.org/content/suppl/2013/11/17/81.21.e160.DC1
http://n.neurology.org/content/suppl/2013/11/17/81.21.e160.DC2

References
This article cites 2 articles, 0 of which you can access for free at:
http://n.neurology.org/content/81/21/e160.full#ref-list-1

Subspecialty Collections
This article, along with others on similar topics, appears in the following collection(s):
Neurofibromatosis
http://n.neurology.org/cgi/collection/neurofibromatosis

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 © 2013 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.