An 81-year-old man with retinitis pigmentosa had severe, slowly progressive visual loss that began at age 20. Intermittent nystagmus was observed for 1 decade. Examination revealed severe retinal atrophy and periodic alternating nystagmus (PAN) that occurred only in darkness (video on the Neurology® Web site at www.neurology.org).

PAN refers to horizontal nystagmus that periodically reverses direction. It is caused by instability of brainstem velocity storage mechanisms that regulate rotationally induced nystagmus, with intact vestibular “repair mechanisms” that are calibrated by visual input. PAN may emerge with impairment of central visual stabilization mechanisms or deficient visual input. This case demonstrates that the presence of PAN may correlate with ambient lighting and maintenance of visual fixation.

REFERENCES
Teaching Video NeuroImages: Periodic alternating nystagmus evident only in darkness
Ali Razmara, Devin Mackay, Steven L. Galetta, et al.

Neurology 2013;80:e32
DOI 10.1212/WNL.0b013e31827f07ab

This information is current as of January 21, 2013

Updated Information & Services
including high resolution figures, can be found at:
http://www.neurology.org/content/80/4/e32.full.html

Supplementary Material
Supplementary material can be found at:
http://www.neurology.org/content/suppl/2013/01/20/80.4.e32.DC1

References
This article cites 2 articles, 1 of which you can access for free at:
http://www.neurology.org/content/80/4/e32.full.html##ref-list-1

Subspecialty Collections
This article, along with others on similar topics, appears in the following collection(s):
All Neuro-ophthalmology
http://www.neurology.org//cgi/collection/all_neuroophthalmology
Nystagmus
http://www.neurology.org//cgi/collection/nystagmus
Visual loss
http://www.neurology.org//cgi/collection/visual_loss

Permissions & Licensing
Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:
http://www.neurology.org/misc/about.xhtml#permissions

Reprints
Information about ordering reprints can be found online:
http://www.neurology.org/misc/addir.xhtml#reprintsus