

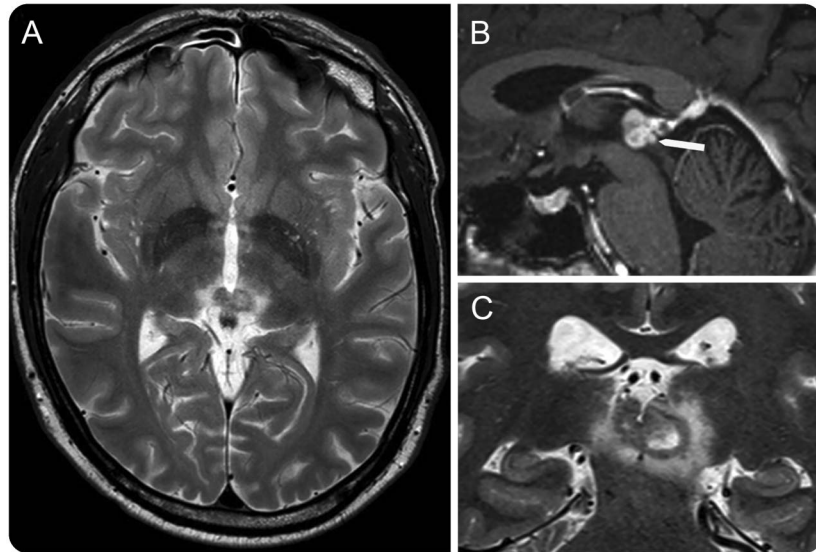
Teaching Video NeuroImages: Minimal anomalies of dorsal midbrain syndrome (Parinaud syndrome)



Pilar Rojas, MD
Philippe Maeder, MD
François-Xavier Borruat,
MD

Correspondence to
Prof. Borruat:
francois.borruat@fa2.ch

Figure Brain MRI



T2 axial and coronal cuts (A, C) and T1 sagittal cut with gadolinium (B) revealed a tumor originating from the walls of the third ventricle posteriorly, with an invasion of the posterior commissure (white arrow). The lesion was later biopsied and pathology revealed a pilocytic astrocytoma.

Parinaud syndrome results from posterior commissure dysfunction, and is associated with 4 major signs: limitation of upgaze, pupillary light-near dissociation, convergence abnormalities, and Collier sign.^{1,2}

A 46-year-old man complained of vertical diplopia due to a subtle left skew deviation. Upgaze pursuit was normal, but upward saccades were slowed, without convergence abnormalities or Collier sign (video at Neurology.org). Pupillary light-near dissociation was present (video). MRI revealed a tectal mesencephalic lesion (figure).

Slowed upward saccades and pupillary light-near dissociation represent an early stage of posterior commissure dysfunction, before frank upgaze palsy, Collier sign, or convergence abnormalities.

AUTHOR CONTRIBUTIONS

Pilar Rojas is an author and contributed to drafting and revising the manuscript. Philippe Maeder is an author, contributed to data acquisition, and revised the manuscript. François-Xavier Borruat is an author, contributed to data acquisition, and revised the manuscript.

STUDY FUNDING

No targeted funding reported.

DISCLOSURE

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

REFERENCES

1. Leigh RJ, Zee DS. *The Neurology of Eye Movements*, 3rd ed. part II, ch 10. Oxford: Oxford University Press; 1999:517–519.
2. Miller NR, Newman NJ. *Clinical Neuro-Ophthalmology*, 5th ed. vol 1, ch 29. Baltimore: Williams & Wilkins; 1998: 1304–1311.

Supplemental data
at Neurology.org

Download teaching slides:
Neurology.org

From the Ophthalmology Department, Jules-Gonin Eye Hospital (P.R., F.-X.B.), and Radiology Department, CHUV (P.M.), University of Lausanne, Switzerland.

Neurology®

**Teaching Video *NeuroImages*: Minimal anomalies of dorsal midbrain syndrome
(Parinaud syndrome)**

Pilar Rojas, Philippe Maeder and François-Xavier Borruat

Neurology 2017;88:e8

DOI 10.1212/WNL.0000000000003462

This information is current as of December 26, 2016

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 © 2016 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.



Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/88/1/e8.full
Supplementary Material	Supplementary material can be found at: http://n.neurology.org/content/suppl/2016/12/27/WNL.0000000000003462.DC1 http://n.neurology.org/content/suppl/2016/12/27/WNL.0000000000003462.DC2
References	This article cites 2 articles, 0 of which you can access for free at: http://n.neurology.org/content/88/1/e8.full#ref-list-1
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): Clinical neurology examination http://n.neurology.org/cgi/collection/clinical_neurology_examination Diplopia (double vision) http://n.neurology.org/cgi/collection/diplopia_double_vision MRI http://n.neurology.org/cgi/collection/mri Ocular motility http://n.neurology.org/cgi/collection/ocular_motility Pupils http://n.neurology.org/cgi/collection/pupils
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 © 2016 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.

