# Teaching Video NeuroImages: Palatal myoclonus in leukodystrophies

# A clinical sign orienting to Alexander disease

Javier Martinez-Poles, MD, José Bernardo Escribano-Paredes, MD, Sebastián García-Madrona, MD, Velina Nedkova-Hristova, MD, and Adriano Jiménez-Escrig, MD, PhD

Neurology® 2020;94:e230-e231. doi:10.1212/WNL.00000000008795

**Correspondence** Dr. Martinez-Poles javimarpo@gmail.com

#### Figure Brain MRI



(A) Sagittal T1 MRI brain shows atrophy of brainstem (arrow) and cerebellum (asterisk). (B) Axial fluidattenuated inversion recovery sequence shows extensive white matter hyperintensities.

A 22-year-old man with Alexander disease type II diagnosed by a compatible MRI with bilateral white matter hyperintensities and brainstem atrophy (figure) and mutation c.236G>A (p.Arg79His) in the *GFAP* gene presented with recent onset continuous palatal myoclonus without ear clicking (video 1).

Palatal myoclonus is caused by a lesion in the triangle of Guillain-Mollaret (formed by dentate nucleus, red nucleus, and inferior olivary nucleus) and associated with hypertrophic olivary degeneration.<sup>1</sup> As Alexander disease is a leukodystrophy that predominantly affects the brainstem, palatal myoclonus can be a useful sign to distinguish it from other leukodystrophies.<sup>2</sup>

#### **Study funding**

No targeted funding reported.

#### Disclosure

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

#### MORE ONLINE

→Teaching slides links.lww.com/WNL/ B31

Video

From the Neurology Department, Ramón y Cajal University Hospital, Madrid, Spain. Go to Neurology.org/N for full disclosures.

e230 Copyright © 2020 American Academy of Neurology

Copyright © 2020 American Academy of Neurology. Unauthorized reproduction of this article is prohibited.

### Appendix Authors

| Name   | Location   | Role   | Contribution   |
|--|--|--------|--|
| Javier<br>Martinez-<br>Poles, MD                 | Neurology<br>Department, Ramón y<br>Cajal University<br>Hospital, Madrid,<br>Spain | Author | Drafted the<br>manuscript for<br>intellectual content,<br>major role in the<br>acquisition of data |
| José<br>Bernardo<br>Escribano-<br>Paredes,<br>MD | Neurology<br>Department, Ramón y<br>Cajal University<br>Hospital, Madrid,<br>Spain | Author | Revised the<br>manuscript for<br>intellectual content  |
| Sebastián<br>Garcia-<br>Madrona,<br>MD           | Neurology<br>Department, Ramón y<br>Cajal University<br>Hospital, Madrid,<br>Spain | Author | Revised the<br>manuscript for<br>intellectual content  |

### Appendix (continued)

| Name                                      | Location   | Role   | Contribution   |
|---|--|--------|--|
| Velina<br>Nedkova-<br>Hristova,<br>MD     | Neurology<br>Department, Ramón y<br>Cajal University<br>Hospital, Madrid,<br>Spain | Author | Revised the<br>manuscript for<br>intellectual content  |
| Adriano<br>Jiménez-<br>Escrig, MD,<br>PhD | Neurology<br>Department, Ramón y<br>Cajal University<br>Hospital, Madrid,<br>Spain | Author | Major role in the<br>acquisition of data,<br>revised the<br>manuscript for<br>intellectual content |
|   |  |        |  |

#### References

- Pearce JMS. Palatal myoclonus (syn palatal tremor). Eur Neurol 2008;60:312–315. Howard KL, Hall DA, Moon M, Agarwal P, Newman E, Brenner M. Adult-onset Alexander disease with progressive ataxia and palatal tremor. Mov Disord 2008;23:118–122. 1. 2.

# Neurology®

### **Teaching Video NeuroImages: Palatal myoclonus in leukodystrophies: A clinical sign orienting to Alexander disease** Javier Martinez-Poles, José Bernardo Escribano-Paredes, Sebastián García-Madrona, et al. *Neurology* 2020;94;e230-e231 DOI 10.1212/WNL.00000000008795

| Updated Information &<br>Services | including high resolution figures, can be found at: http://n.neurology.org/content/94/2/e230.full   |
|-----------------------------------|---|
| References                        | This article cites 2 articles, 0 of which you can access for free at: http://n.neurology.org/content/94/2/e230.full#ref-list-1  |
| Subspecialty Collections          | This article, along with others on similar topics, appears in the following collection(s):<br><b>Clinical neurology examination</b><br>http://n.neurology.org/cgi/collection/clinical_neurology_examination<br><b>Leukodystrophies</b><br>http://n.neurology.org/cgi/collection/leukodystrophies<br><b>Myoclonus</b><br>http://n.neurology.org/cgi/collection/myoclonus |
| Permissions & Licensing           | Information about reproducing this article in parts (figures,tables) or in<br>its entirety can be found online at:<br>http://www.neurology.org/about/about_the_journal#permissions  |
| Reprints                          | Information about ordering reprints can be found online:<br>http://n.neurology.org/subscribers/advertise  |

## This information is current as of January 13, 2020

*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 © 2020 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.

