

# Neurology<sup>®</sup>

The most widely read and highly cited peer-reviewed neurology journal  
The Official Journal of the American Academy of Neurology



---

Neurology Publish Ahead of Print  
DOI: 10.1212/WNL.000000000010741

## Teaching NeuroImages: A case of Lance Adams syndrome with see-saw nystagmus

Authors: Gabriela Keeton, MD; Tarek Ali, MBBS; Padmaja Sudhakar, MD; Zain Guduru, MD

Gabriela Keeton, University of Kentucky, Department of Neurology, Lexington, KY, USA

Tarek Ali, University of Kentucky, Department of Neurology, Lexington, KY, USA

Padmaja Sudhakar, University of Kentucky, Department of Neurology, Lexington, KY, USA

Zain Guduru, University of Kentucky, Department of Neurology, Lexington, KY, USA

**Search Terms:** Clinical neurology examination [16], Dystonia [162], Motor Control [310], Myoclonus [173], Nystagmus [192]

**Publication History:** This video neuroimage has not been previously published

**Supplemental Data:** SSNfinal.mpeg

Submission Type: Video NeuroImage

Title Character count: 53

Number of Tables: 0

Number of Figures: 0

Number of References: 2

Word count of Abstract: 0

Word Count of Paper: 95

**Corresponding Author:** Gabriela Keeton, [grke226@uky.edu](mailto:grke226@uky.edu)

*Neurology*<sup>®</sup> Published Ahead of Print articles have been peer reviewed and accepted for publication. This manuscript will be published in its final form after copyediting, page composition, and review of proofs. Errors that could affect the content may be corrected during these processes.

**Disclosures:** The authors report no disclosures relevant to the study

**Statistical Analysis:** this Video NeuroImage did not require any statistical analysis

**Study Funding:** No targeted funding reported.

### Teaching NeuroImages: A case of Lance Adams syndrome with see-saw nystagmus

See-saw nystagmus (SSN) is a rare ocular manifestation and is characterized by cyclic movement of the eyes with a conjugate torsional component and a disjunctive vertical component. We present a 29-year-old woman with alcohol withdrawal seizure resulting in anoxic brain injury secondary to respiratory failure. On exam, she has multifocal myoclonus, dystonia and SSN (video,<http://links.lww.com/WNL/B200>). The proposed mechanism is inactivation of the torsional eye-velocity integrator, the interstitial nucleus of Cajal, with sparing of the torsional fast-phase generator, the rostral interstitial nucleus of MLF. This is a unique case of Lance Adams Syndrome<sup>1,2</sup> combined with SSN.

#### Appendix 1: Authors

Name	Location	Contribution
Gabriela Keeton, MD	University of Kentucky	Drafting and revision of case write up, organized different components for submission
Tarek Ali, MBBS	University of Kentucky	Revision for intellectual content
Padmaja Sudhakar, MD	University of Kentucky	Revision for intellectual content
Zain Guduru, MD	University of Kentucky	Drafting and revision of case write up, video editing and formatting

**Video-**<http://links.lww.com/WNL/B200>

**Teaching Slides-**<http://links.lww.com/WNL/B202>

#### References:

1. Lance JW, Adams RD. The syndrome of intention or action myoclonus as a sequel to hypoxic encephalopathy. *Brain* 1963; 86: 111-136.
2. Werhahn KJ, Brown P, Thompson PD, Marsden CD. The clinical features and prognosis of chronic posthypoxic myoclonus. *Mov Disord* 1997; 12: 216-220.

#### Video Legend

Title: A Case of Lance Adams Syndrome with See-Saw Nystagmus

Legend: 29yo woman with alcohol withdrawal seizure resulting in anoxic brain injury secondary to respiratory failure. Exam demonstrates multifocal myoclonus, dystonia, and see-saw nystagmus.

# Neurology<sup>®</sup>

## Teaching NeuroImages: A case of Lance Adams syndrome with see-saw nystagmus

Gabriela Keeton, Tarek Ali, Padmaja Sudhakar, et al.

*Neurology* published online September 11, 2020

DOI 10.1212/WNL.0000000000010741

**This information is current as of September 11, 2020**

<b>Updated Information &amp; Services</b>	including high resolution figures, can be found at: <a href="http://n.neurology.org/content/early/2020/09/11/WNL.0000000000010741.citation.full">http://n.neurology.org/content/early/2020/09/11/WNL.0000000000010741.citation.full</a>
<b>Subspecialty Collections</b>	This article, along with others on similar topics, appears in the following collection(s): <b>Clinical neurology examination</b> <a href="http://n.neurology.org/cgi/collection/clinical_neurology_examination">http://n.neurology.org/cgi/collection/clinical_neurology_examination</a> <b>Dystonia</b> <a href="http://n.neurology.org/cgi/collection/dystonia">http://n.neurology.org/cgi/collection/dystonia</a> <b>Motor Control</b> <a href="http://n.neurology.org/cgi/collection/motor_control">http://n.neurology.org/cgi/collection/motor_control</a> <b>Myoclonus</b> <a href="http://n.neurology.org/cgi/collection/myoclonus">http://n.neurology.org/cgi/collection/myoclonus</a> <b>Nystagmus</b> <a href="http://n.neurology.org/cgi/collection/nystagmus">http://n.neurology.org/cgi/collection/nystagmus</a>
<b>Permissions &amp; Licensing</b>	Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at: <a href="http://www.neurology.org/about/about_the_journal#permissions">http://www.neurology.org/about/about_the_journal#permissions</a>
<b>Reprints</b>	Information about ordering reprints can be found online: <a href="http://n.neurology.org/subscribers/advertise">http://n.neurology.org/subscribers/advertise</a>

*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.

