

# Teaching Video NeuroImage: Parinaud Syndrome Due to Ventriculoperitoneal Shunt Malfunction in a Patient With Neurosarcoidosis

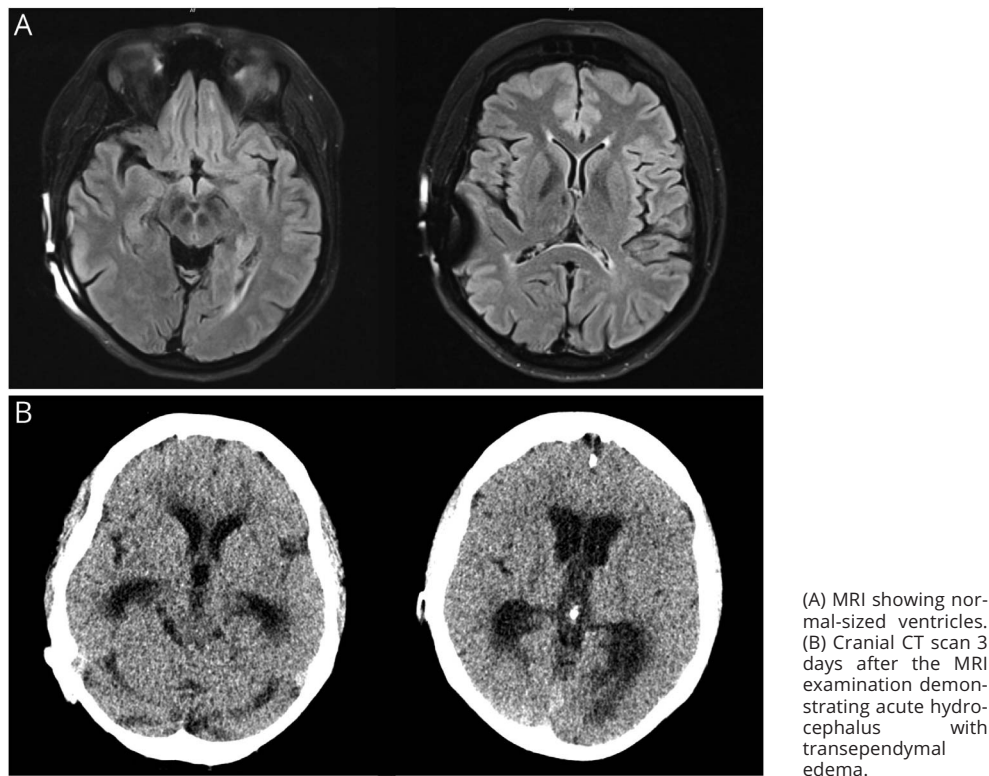
Anika Frank, MD, Constanze Weber, Jonas Bendig, MD, and Jochen Schaefer, MD

*Neurology*® 2022;98:947-948. doi:10.1212/WNL.0000000000200577

## Correspondence

Dr. Frank  
anika.frank@  
uniklinikum-dresden.de

## Figure Brain Imaging Before and After Valve Malfunction



A 37-year-old patient with biopsy-proven neurosarcoidosis was admitted for a follow-up cranial MRI. Because of obstructive hydrocephalus at initial presentation, a ventriculoperitoneal shunt system had previously been implanted.

After the MRI, she developed diplopia, headache, and Parinaud syndrome (Video 1).<sup>1,2</sup> A CT scan showed impaired CSF drainage caused by altered valve pressure settings after the MRI (Figure). Elevated CSF pressure is a frequent cause of Parinaud (dorsal midbrain or pretectal) syndrome because of the proximity of the posterior commissure and its interstitial nucleus to the aqueduct. Readjustment of the valve settings rapidly cleared the Parinaud syndrome.

## MORE ONLINE

 Video

## Teaching slides

[links.lww.com/WNL/B908](https://links.lww.com/WNL/B908)

From the Department of Neurology (A.F., C.W., J.B., J.S.), University Hospital Carl Gustav Carus, Technische Universität Dresden; and German Center for Neurodegenerative Diseases (DZNE) (A.F.), Dresden, Germany.

Go to [Neurology.org/N](https://Neurology.org/N) for full disclosures. Funding information and disclosures deemed relevant by the authors, if any, are provided at the end of the article.

## Study Funding

The authors report no targeted funding.

## Disclosure

The authors report no disclosures relevant to the manuscript. Go to [Neurology.org/N](http://Neurology.org/N) for full disclosures.

## Publication History

Received by *Neurology* October 19, 2021. Accepted in final form March 7, 2022. Submitted and externally peer reviewed. The handling editor was Whitley Aamodt, MD, MPH.

## Appendix Authors

Name	Location	Contribution
<b>Anika Frank, MD</b>	Department of Neurology, University Hospital Carl Gustav Carus, Technische Universität Dresden; German Center for Neurodegenerative Diseases (DZNE), Dresden, Germany	Drafting/revision of the article for content, including medical writing for content; major role in the acquisition of data; and other

## Appendix (continued)

Name	Location	Contribution
<b>Constanze Weber</b>	Department of Neurology, University Hospital Carl Gustav Carus, Technische Universität Dresden, Dresden, Germany	Drafting/revision of the article for content, including medical writing for content; and major role in the acquisition of data
<b>Jonas Bendig, MD</b>	Department of Neurology, University Hospital Carl Gustav Carus, Technische Universität Dresden, Dresden, Germany	Drafting/revision of the article for content, including medical writing for content
<b>Jochen Schaefer, MD</b>	Department of Neurology, University Hospital Carl Gustav Carus, Technische Universität Dresden, Dresden, Germany	Drafting/revision of the article for content, including medical writing for content, and major role in the acquisition of data

## References

1. Keane JR. The pretectal syndrome: 206 patients. *Neurology*. 1990;40(4):684-690.
2. Shields M, Sinkar S, Chan WO, Crompton J. Parinaud syndrome: a 25-year (1991-2016) review of 40 consecutive adult cases. *Acta Ophthalmol*. 2017;95(8):e792-e793.


## The AAN Has Your Back!


Every day, the AAN is fighting for you. From actively lobbying members of Congress for common sense legislation, to meeting with regulators to demonstrate the value of neurology and reduce regulatory hassles, the Academy is forcefully countering any threats to your profession and patient access to care. Learn more at [AAN.com/policy-and-guidelines](http://AAN.com/policy-and-guidelines), read the bimonthly Capitol Hill Report and monthly *AANnews*® member magazine, and respond to Advocacy Action Alert emails when we invite you to share your voice with Congress.

Get into the conversation at #AANAdvocacy.

## Visit the *Neurology*® Website at [Neurology.org/N](http://Neurology.org/N)

- More article-based content on home pages
- Streamlined menus and navigation
- Enhanced blog sections for specialty areas
- Same experience on desktop, tablet, and mobile devices
- Improved article reading experience; links more evident (pdf, analytics, social media)
- *Neurology*® *Clinical Practice* initiative “Practice Current” global surveys will be accessible across sites

 Find *Neurology*® on Facebook: <http://tinyurl.com/neurologyfan>

 Follow *Neurology*® on Twitter: <https://twitter.com/GreenJournal>

# Neurology<sup>®</sup>

## Teaching Video NeuroImage: Parinaud Syndrome Due to Ventriculoperitoneal Shunt Malfunction in a Patient With Neurosarcoidosis

Anika Frank, Constanze Weber, Jonas Bendig, et al.

*Neurology* 2022;98;947-948 Published Online before print April 4, 2022

DOI 10.1212/WNL.0000000000200577

**This information is current as of April 4, 2022**

<b>Updated Information &amp; Services</b>	including high resolution figures, can be found at: <a href="http://n.neurology.org/content/98/22/947.full">http://n.neurology.org/content/98/22/947.full</a>
<b>References</b>	This article cites 2 articles, 1 of which you can access for free at: <a href="http://n.neurology.org/content/98/22/947.full#ref-list-1">http://n.neurology.org/content/98/22/947.full#ref-list-1</a>
<b>Subspecialty Collections</b>	This article, along with others on similar topics, appears in the following collection(s): <b>All Neuro-ophthalmology</b> <a href="http://n.neurology.org/cgi/collection/all_neuroophthalmology">http://n.neurology.org/cgi/collection/all_neuroophthalmology</a> <b>Hydrocephalus</b> <a href="http://n.neurology.org/cgi/collection/hydrocephalus">http://n.neurology.org/cgi/collection/hydrocephalus</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 © 2022 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.

