

Teaching NeuroImage: A 41-Year-Old Woman Presented With Excessive Sweating of Contralateral Face and Extremity

Anjiao Peng, PhD, MD, Yusha Tang, MD, Tingting Song, MD, and Lei Chen, PhD, MD

Neurology® 2021;97:e2429-e2430. doi:10.1212/WNL.00000000000012666

Correspondence

Dr. Chen
leilei_25@126.com

Figure Excessive Sweating of the Contralateral Face and Leg



Excessive sweating of the right face after exercise 3 years earlier (A). Excessive sweating and flushing of the right face (B), shoulder (C), and left leg (D) after exercise at her 3-year follow-up.

A 41-year-old woman presented to our hospital with a 12-year history of recurrent episodes of excessive sweating on her right face, neck, shoulder, and left calf after exercise (Figure). Cranial nerve examination was normal. Routine tests, thyroid function, ultrasound of carotid artery, MRI of the head, mediastinum, cervical and lumbar spine, and whole-body 18F-FDG PET/MRI were all negative. At her 3-year follow-up, her entire left leg was affected. She was finally diagnosed with Harlequin syndrome. Harlequin syndrome is attributed to sympathetic dysfunction.¹ Contralateral involvement of autonomic nerves is relatively rare. Causes include syringomyelia, carotid artery dissection, tumors, or brainstem infarction, but many cases are idiopathic.^{1,2} Usually, Harlequin syndrome requires no treatment, but botulinum toxin can be tried in patients with severe symptoms.¹

Study Funding

This study was supported by Sichuan University full-time postdoctoral research and development fund (No. 20826041D4035).

Disclosure

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

From the Department of Neurology, West China Hospital, Sichuan University, Chengdu, China.

Go to [Neurology.org/N](https://www.neurology.org/N) for full disclosures.

Copyright © 2021 American Academy of Neurology

Copyright © 2021 American Academy of Neurology. Unauthorized reproduction of this article is prohibited.

MORE ONLINE

Teaching slides

links.lww.com/WNL/B501

Appendix Authors

Name	Location	Contribution
Anjiao Peng, MD	West China Hospital, Sichuan University	Drafting/revision of the article for content, including medical writing for content, and study concept or design
Yusha Tang	West China Hospital, Sichuan University	Major role in the acquisition of data
Tingting Song	West China Hospital, Sichuan University	Major role in the acquisition of data

Appendix (continued)

Name	Location	Contribution
Lei Chen, MD	West China Hospital, Sichuan University	Drafting/revision of the article for content, including medical writing for content, and study concept or design

References

1. Manhães R, Spitz M, Vasconcellos L. Botulinum toxin for treatment of Harlequin syndrome. *Parkinsonism Relat Disord*. 2016;112-113.
2. Chen L, Zhou M. Must be sympathetic nervous system with unilateral facial flushing in harlequin syndrome. *Lancet*. 2021;397(10271):318.

Neurology®

Teaching NeuroImage: A 41-Year-Old Woman Presented With Excessive Sweating of Contralateral Face and Extremity

Anjiao Peng, Yusha Tang, Tingting Song, et al.

Neurology 2021;97:e2429-e2430 Published Online before print August 16, 2021

DOI 10.1212/WNL.0000000000012666

This information is current as of August 16, 2021

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/97/24/e2429.full
References	This article cites 1 articles, 0 of which you can access for free at: http://n.neurology.org/content/97/24/e2429.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
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 © 2021 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.

