

Teaching Video NeuroImage: Uncommon Neuro-ophthalmic Finding in a Patient With Miller Fisher Syndrome and Past SARS-CoV-2 Infection

Aldo F. Costa, MD, Alba Rodríguez, MD, Paula Martínez, MD, and Del Carmen M. Blanco, MD

Neurology® 2021;97:e2431-e2432. doi:10.1212/WNL.00000000000012859

A 21-year-old woman developed diplopia, rhinolalia, and movement imbalance 3 weeks after COVID-19. On neurologic examination, she presented with left mydriasis, mild bilateral lateral rectus palsy, and horizontal gaze-evoked eyelid nystagmus (Video 1). The patient's generalized hyporeflexia and ataxic gait were consistent with symptoms of Miller Fisher syndrome (MFS). A test for GQ1b antibodies returned positive. Despite immunoglobulin therapy, the patient developed respiratory failure requiring mechanical ventilation. The symptoms improved over the succeeding days. MFS has been associated with COVID-19, but this is the first case with positive GQ1b antibodies.¹ Eyelid nystagmus is an intermittent upward jerking of eyelids associated with posterior fossa lesions that can also be present in MFS.²

Study Funding

The authors report no targeted funding.

Disclosure

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

Correspondence

Dr. Costa
aldocosva_01@hotmail.com

MORE ONLINE

Video

Teaching slides

links.lww.com/WNL/B553

COVID-19 Resources

For the latest articles, invited commentaries, and blogs from physicians around the world

[NPub.org/COVID19](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7500000/)

Appendix Authors

Name	Location	Contribution
Aldo F. Costa, MD	Department of Neurology, University Hospital Reina Sofía, Córdoba, Spain	Drafting/revision of the manuscript for content, including medical writing for content, major role in the acquisition of data, study concept or design, and analysis or interpretation of data
Alba Rodríguez, MD	Department of Neurology, University Hospital Reina Sofía, Córdoba, Spain	Drafting/revision of the manuscript for content, including medical writing for content, major role in the acquisition of data, study concept or design, and analysis or interpretation of data

Appendix (continued)

Name	Location	Contribution
Paula Martínez, MD	Department of Neurology, University Hospital Reina Sofía, Córdoba, Spain	Drafting/revision of the manuscript for content, including medical writing for content, and analysis or interpretation of data
M. Del Carmen Blanco, MD	Department of Neurology, University Hospital Reina Sofía, Córdoba, Spain	Major role in the acquisition of data and analysis or interpretation of data

References

1. Kajani S, Kajani R, Huang CW, Tran T, Liu AK. Miller Fisher syndrome in the COVID-19 era—a novel target antigen calls for novel treatment. *Cureus*. 2021;13(1):e12424.
2. Milivojević I, Bakran Ž, Adamec I, Miletić Gršković S, Habek M. Eyelid nystagmus and primary position upbeat nystagmus. *Neurol Sci*. 2013;34(8):1463-1464.

Neurology®

Teaching Video NeuroImage: Uncommon Neuro-ophthalmic Finding in a Patient With Miller Fisher Syndrome and Past SARS-CoV-2 Infection

Aldo F. Costa, Alba Rodríguez, Paula Martínez, et al.

Neurology 2021;97:e2431-e2432 Published Online before print September 23, 2021

DOI 10.1212/WNL.0000000000012859

This information is current as of September 23, 2021

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/97/24/e2431.full
References	This article cites 2 articles, 0 of which you can access for free at: http://n.neurology.org/content/97/24/e2431.full#ref-list-1
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): COVID-19 http://n.neurology.org/cgi/collection/covid_19 Eyelids http://n.neurology.org/cgi/collection/eyelids Guillain-Barre syndrome http://n.neurology.org/cgi/collection/guillainbarre_syndrome Nystagmus http://n.neurology.org/cgi/collection/nystagmus Ocular motility http://n.neurology.org/cgi/collection/ocular_motility
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.

