Miller Fisher syndrome and polyneuritis cranialis in COVID-19

Consuelo Gutiérrez-Ortiz, MD, PhD, Antonio Méndez-Guerrero, MD, Sara Rodrigo-Rey, MD, et al.

Cite as: Neurology® 2020;95:e601-e605. doi:10.1212/WNL.0000000000009619

Correspondence
Dr. Benito-León
jbenitol67@gmail.com

Study objective
To report 2 patients infected with SARS-CoV-2 who presented with Miller Fisher syndrome and polyneuritis cranialis, respectively.

What is known and what this paper adds
Patients infected with SARS-CoV-2 have presented with neurologic signs, symptoms, and syndromes. These cases add Miller Fisher syndrome and polyneuritis cranialis as potential neurologic manifestations of SARS-CoV-2 infection.

Design, size, and duration
The investigators extracted data concerning the patients’ clinical features and outcomes from hospital records.

Participants and findings
The first patient was a 50-year-old man who developed anosmia, ageusia, right internuclear ophthalmoparesis, right fascicular oculomotor palsy, ataxia, areflexia, and albuminocytologic dissociation and tested positive for immunoglobulin G antibodies against ganglioside GD1b. This picture was consistent with Miller Fisher syndrome. He had a positive oropharyngeal swab test by PCR for SARS-CoV-2. PCR in CSF was negative. He was treated with IVIg and made a complete recovery. The second patient was a 39-year-old man who presented with ageusia, bilateral abducens palsy, areflexia, and albuminocytologic dissociation. The picture was consistent with polyneuritis cranialis. PCR was positive in the oropharyngeal swab but negative in CSF.

Bias, confounding, and other reasons for caution
The patients did not undergo electromyography, nerve conduction studies, or MRI. The presence of Miller Fisher syndrome and polyneuritis cranialis in these 2 patients could have been coincidental.

Study funding/potential competing interests
This study was funded by Fondo Europeo de Desarrollo Regional. Some authors report additional competing interests. Go to Neurology.org/N for full disclosures.
Miller Fisher syndrome and polyneuritis cranialis in COVID-19
Consuelo Gutiérrez-Ortiz, Antonio Méndez-Guerrero, Sara Rodrigo-Rey, et al.
Neurology 2020;95:e601-e605 Published Online before print April 17, 2020
DOI 10.1212/WNL.0000000000009619

This information is current as of April 17, 2020

Updated Information & Services
including high resolution figures, can be found at:
http://n.neurology.org/content/95/5/e601.full

References
This article cites 15 articles, 0 of which you can access for free at:
http://n.neurology.org/content/95/5/e601.full#ref-list-1

Citations
This article has been cited by 16 HighWire-hosted articles:
http://n.neurology.org/content/95/5/e601.full##otherarticles

Subspecialty Collections
This article, along with others on similar topics, appears in the following collection(s):
All Neuro-ophthalmology
http://n.neurology.org/cgi/collection/all_neuroophthalmology
Cranial neuropathy
http://n.neurology.org/cgi/collection/cranial_neuropathy
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