

Accepted Manuscript



Myelin Oligodendrocyte Glycoprotein Antibody (MOG-IgG)-Positive Optic Neuritis:
Clinical Characteristics, Radiologic Clues and Outcome

John J. Chen, Eoin P. Flanagan, Jiraporn Jitprapaikulsan, Alfonso (Sebastian) S. Lopez Chiriboga, James P. Fryer, Jacqueline A. Leavitt, Brian G. Weinshenker, Andrew McKeon, Jan-Mendelt Tillema, Vanda A. Lennon, W. Oliver Tobin, B. Mark Keegan, Claudia F. Lucchinetti, Orhun H. Kantarci, Collin M. McClelland, Michael S. Lee, Jeffrey L. Bennett, Victoria S. Pelak, Yanjun Chen, Gregory VanStavern, Ore-Ofe O. Adesina, Eric R. Eggenberger, Marie D. Acierno, Dean M. Wingerchuk, Paul W. Brazis, Jessica Sagen, Sean J. Pittock

PII: S0002-9394(18)30401-X

DOI: [10.1016/j.ajo.2018.07.020](https://doi.org/10.1016/j.ajo.2018.07.020)

Reference: AJOPHT 10589

To appear in: *American Journal of Ophthalmology*

Received Date: 21 March 2018

Revised Date: 25 June 2018

Accepted Date: 18 July 2018

Please cite this article as: Chen JJ, Flanagan EP, Jitprapaikulsan J, Chiriboga A(S)SL, Fryer JP, Leavitt JA, Weinshenker BG, McKeon A, Tillema J-M, Lennon VA, Tobin WO, Keegan BM, Lucchinetti CF, Kantarci OH, McClelland CM, Lee MS, Bennett JL, Pelak VS, Chen Y, VanStavern G, Adesina O-OO, Eggenberger ER, Acierno MD, Wingerchuk DM, Brazis PW, Sagen J, Pittock SJ, Myelin Oligodendrocyte Glycoprotein Antibody (MOG-IgG)-Positive Optic Neuritis: Clinical Characteristics, Radiologic Clues and Outcome, *American Journal of Ophthalmology* (2018), doi: 10.1016/j.ajo.2018.07.020.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

1 **Purpose:** To characterize the clinical phenotype of myelin oligodendrocyte glycoprotein
2 antibody (MOG-IgG) optic neuritis.

3 **Design:** Observational case series

4 **Methods:**

5 •Setting: multicenter

6 •Patient/Study Population: Inclusion criteria: 1) History of optic neuritis; 2) Seropositivity
7 (MOG-IgG binding index > 2.5); 87 MOG-IgG seropositive patients with optic neuritis were
8 included (Mayo Clinic, 76; other medical centers, 11). MOG-IgG was detected using full-length
9 MOG-transfected live HEK293 cells in a clinically validated flow cytometry assay.

10 •Main Outcome Measure(s): Clinical and radiologic characteristics and visual outcomes.

11 **Results:** 57% were female and median age at onset was 31 (range 2-79). Median number of optic
12 neuritis attacks was 3 (range 1-8), median follow-up 2.9 years (range 0.5-24), and annualized
13 relapse rate was 0.8. Average VA at nadir of worst attack was CF. Average final VA was 20/30;
14 for 5 patients (6%) it was $\leq 20/200$ in either eye. Optic disc edema and pain each occurred in 86%
15 of patients. MRI showed perineural enhancement in 50% and longitudinally extensive
16 involvement in 80%. 26 patients (30%) had recurrent optic neuritis without other neurologic
17 symptoms, 10 (12%) had single optic neuritis, 14 (16%) had CRION, and 36 (41%) had optic
18 neuritis with other neurologic symptoms (most NMOSD-like phenotype or ADEM). Only one
19 patient was diagnosed with MS (MOG-IgG-binding index 2.8; normal range ≤ 2.5). Persistent
20 MOG-IgG seropositivity occurred in 61 of 62 (98%). 61% received long-term
21 immunosuppressant therapy.

22 **Conclusions:** Manifestations of MOG-IgG-positive optic neuritis are diverse. Despite recurrent
23 attacks with severe vision loss, the majority of patients has significant recovery and retains
24 functional vision long-term.

25

Download English Version:

<https://daneshyari.com/en/article/10138081>

Download Persian Version:

<https://daneshyari.com/article/10138081>

[Daneshyari.com](https://daneshyari.com)