



# MOGmentum

## Series #1

Let's gain

## MOGmentum

a collaborative series brought to you by The MOG Project and The Sumaira Foundation for NMO

Myelin

Oligodendrocyte

Glycoprotein

Antibody Disease

MOG-AD is a rare neuroimmune condition that targets the MOG protein which is located on the surface of myelin sheaths in the central nervous system.

- Occurs in all decades of life with median age of onset early 30s.<sup>2</sup>
- Found in 40% of children and 22% of adults that have non-MS demyelinating disorders.<sup>1</sup>
- Only slightly more predominant in females.<sup>2</sup>
- No ethnic bias.<sup>2</sup>
- Numbers growing as testing becomes more widespread and statistics are collected.
- Estimate to reach an occurrence of 1 in 100,000 or even 2 in 100,000.<sup>3</sup>

Symptoms may include:

- Loss or blurring of vision, loss of color vision.
- Paralysis or weakness of a limb or limbs, loss of sensation, alterations of sensation in bowel and bladder function.
- Chronic fatigue.
- Hearing loss
- Seizures, behavioral change, memory loss.
- May be monophasic or relapsing

Some Residual symptoms may be permanent.



## Diagnosis Testing

- MOG Antibody Titers blood test.
- Magnetic Resonance Imaging (MRI).
- Optical Coherence Tomography (OCT).
- Visual Field Test (VFT).
- Neurological exams.

Many tests are to rule out other autoimmune disorders.

MOG-AD has been associated with the following symptoms: ADEM, encephalitis (all ages), transverse myelitis, and optic neuritis.

## Treatments

### Acute (during an attack or flare)

- IV steroids.
- Oral steroids.
- Plasma exchange (PLEX) aka plasmapheresis.
- Intravenous immunoglobulin (IVIG).

### Preventative (Long-term)

- Mycophenolate mofetil (Cellcept).
- Azathioprine (Imuran).
- Prednisone (steroids).
- IVIG
- Rituximab (Rituxan) (rarely in some cases)

### Pipeline (In development)

- A new treatment is being developed that will be announced in 2020/2021.



This series is brought to you by

The MOG PROJECT

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## References

1. Blackburn MD, Kyle. "Session on the Diagnosis and Treatment of MOG antibody-Associated Disease.: SRNA, September 20, 2019, <http://wearesrna.org/resources/session-on-the-diagnosis-and-treatment-of-mog-antibody-associated-disease/>.
2. Wynford-Thomas, Ray, et al. "Neurological Update: MOG Antibody Disease." *Journal of Neurology*, vol. 266, 2018, pp. 1280-1286. <https://doi.org/10.1007/s00415-018-9122-2>
3. Based on observation of numbers coming out of Mayo and UK laboratories.