

# Cerebrospinal Fluid Eosinophils in Pediatric Myelin Oligodendrocyte Glycoprotein Antibody-Associated Disease (MOGAD)

Alexandra B. Kornbluh, Victor M. Campano, Claire Har, Pallavi Dwivedi, William Suslovic, Ilana Kahn  
Children's National Hospital

## BACKGROUND

- Eosinophils in CSF are uncommon
  - Associated with parasitic infections<sup>1</sup>
- Eosinophils present in 10 – 15% of acute CSF samples from patients with AQP4+ NMO<sup>2</sup>
- Eosinophilic granulocytes are seen in acute NMO lesions<sup>3</sup>
- Eosinophilic infiltration is not thought to be typical of MOGAD<sup>3,4</sup>
- Only seen in up to 7% of samples in prior studies<sup>5</sup>

## METHODS

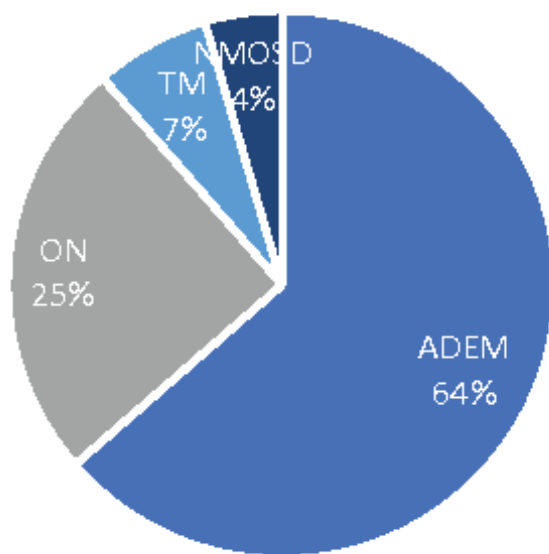
- Retrospective chart review
- 46 pediatric patients at Children's National Hospital
- Patients with positive serum MOG-IgG
- Analyzed with descriptive statistics

## RESULTS

### Demographics

Mean age	11.7 years
Sex	Male: 19/44 (43%) Female: 25/44 (57%)
Racial Group	White/Caucasian: 25/39 (64%) Black/African: 13/39 (33%) Asian: 1/39 (3%)

### MOGAD Phenotype



### CSF Eosinophils

<b>Eosinophils present</b>	<b>12/36 (33%)</b>
Mean	2.25%
Median	2%
Mode	1%
Range	1 – 18%

## CONCLUSIONS

- Eosinophils were found in **1/3** of pediatric MOGAD patients in this retrospective cohort
- Rate of CSF eosinophil positivity is significantly higher than previous cohorts
- May be higher than rates reported in AQP4+ NMO
- Findings may facilitate more prompt diagnosis and treatment for MOGAD

## REFERENCES

1. Kuberski T. Ann Intern Med. 1979. 2. Jarius S, et al J Neurol Sci. 2011. 3. Weber MS, et al. Ther Adv Neurol Disord. 2018. 4. Jarius S, et al. Mult Scler. 2016. 5. Jarius S, et al. J Neuroinflammation. 2020



Sponsors

