Case Series of Pediatric Myelin oligodendrocyte glycoprotein Antibody Associated Disease at a Pediatric tertiary center in Dubai, UAE

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INTRODUCTION

Myelin oligodendrocyte glycoprotein (MOG) antibody -associated disease is an inflammatory disorder of the central nervous system characterized by attacks of immune mediated demyelination predominantly targeting the optic nerves, brain and spinal cord. It has a predilection for children. Myelin oligodendrocyte glycoprotein (MOG) is a protein on the surface of oligodendrocytes.

OBJECTIVE

To describe the clinical radiological spectrum, management and outcomes of pediatric myelin oligodendrocyte glycoprotein antibody associated disease(MOGAD).

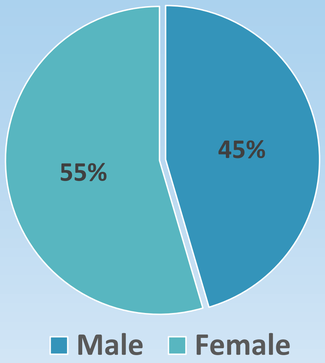
METHODS

Identifying patients with Central Nervous System(CNS) demyelination who tested positive for Myelin Oligodendrocyte Glycoprotein(MOG) antibodies in CSF and/or serum followed by retrospective and prospective medical record review.

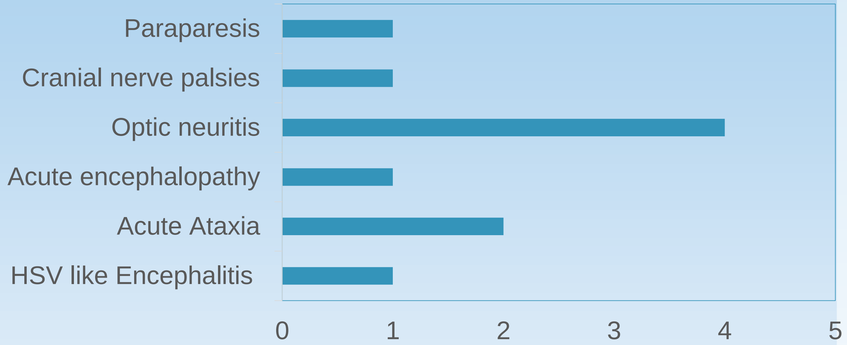
RESULTS

Total Number of Cases	11
Median age of presentation	7 years

Gender distribution



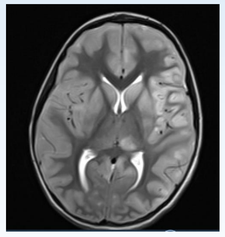
Clinical presentation

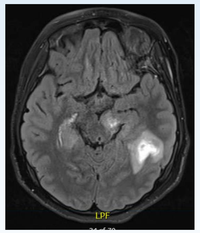


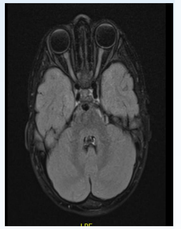
Investigations

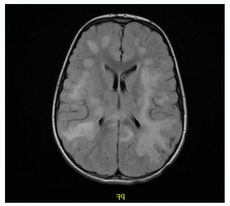
CSF pleocytosis	• 5/11(45% of cases)
MOG Ab Titres	• +ve in serum for 9/11cases • +ve in CSF for 3/11cases
Aquaporin Abs	• Negative in all cases
EEG	BiPLEDS, Delta slowing, mutifocal/generalized epileptiform discharges

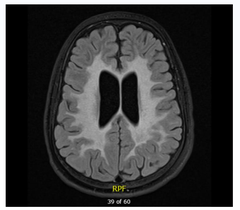
Imaging findings


Encephalitis

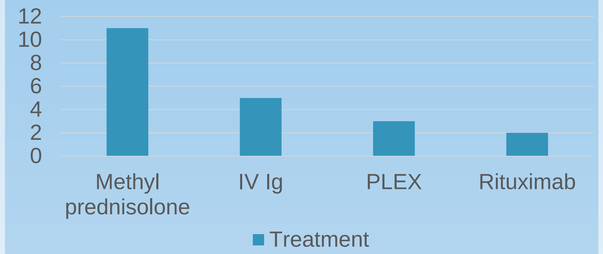

Lobulated lesion


B/l Optic nerve


ADEM like


Leuckodystrophy

Treatment



Disease course

Monophasic	8/11(77%)
Limited relapse	2/11(18%)
Multiple chronic relapses	1/11(9%)

CONCLUSION

Pediatric MOGAD can have varied presentations including ADEM, optic neuritis, aseptic meningitis, recurrent cranial neuropathies and acute encephalitis. Majority of the patients have a monophasic favorable outcome needing only first line immunotherapy. Occasional relapsing patient may need second line immunotherapy.

Contact

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