Title: “The Masquerading Myelin: Unveiling MOGAD Masking as Multiple Sclerosis - A Case Report”

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INTRODUCTION
Myelin oligodendrocyte glycoprotein Antibody disease (MOGAD) is a CNS demyelination disorder that has a presentation very similar to Multiple sclerosis (MS) and can easily be mistaken for MS, causing a diagnostic dilemma.

CASE PRESENTATION

PATIENT
- 30 year old woman
- Multiple comorbidites (Migraines, IBD, anxiety disorder)

SYMPTOMS
- Abdominal pain (sharp, radiating to back)
- Pain shoots down back on neck flexion
- Lower extremity numbness – progressed from right leg to left leg.
- Bowel and urine incontinence

IMAGING
- Thoracic MRI without contrast (increased T2 signal at T5, T9 levels), C4 and C5 levels, demyelinating longitudinal plaque
- Brain MRI unremarkable.

DIAGNOSTIC TEST
- LP demonstrating oligoclonal bands.
- Positive antibodies against MOG in serum.

DIAGNOSIS
- Initially suspected Multiple Sclerosis
- Later confirmed as MOG Antibody Disease (MOGAD).

TREATMENT
- Initially treated with steroids for 5 days (no improvement)
- Subsequently treated with plasmapheresis.

CLINICAL OUTCOME
- Patient showed improvement after plasmapheresis.

DISCUSSION
- MOGAD mimics MS, causing optic neuritis, transverse myelitis, or encephalitis.
- MOGAD presents with bilateral spinal lesions and positive MOG antibodies, contrasting with MS brain lesions.
- Initial treatment is similar, but MOGAD tends to be monophasic, while MS relapses and requires ongoing therapy.

CONCLUSION
- Our case underscores the critical need for prompt differentiation between MS and MOGAD due to distinct clinical features, emphasizing the importance of modified treatment strategies for each condition.
- Relapses are more common in MS and respond to DMARD unlike MOGAD which is less likely to respond to DMARD.

REFERENCES