

E-poster

Atypical Trigger or Unmasking? Varicella-Zoster Infection Precipitating MOGAD Myelitis

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INTRODUCTION

- Myelin Oligodendrocyte Glycoprotein Antibody-Associated Disease (MOGAD) is a rare, immune-mediated demyelinating disorder of the CNS, which may be unmasked or triggered by preceding infections.
- Post-infectious immune dysregulation is a well-recognized trigger, and viral illnesses like influenza, SARS-CoV-2, and varicella have been implicated.
- However, distinguishing direct viral invasion from immune-mediated demyelination is essential, as the therapeutic approaches differ drastically.
- This diagnostic dilemma is particularly relevant when patients present soon after viral illnesses, as in the present case

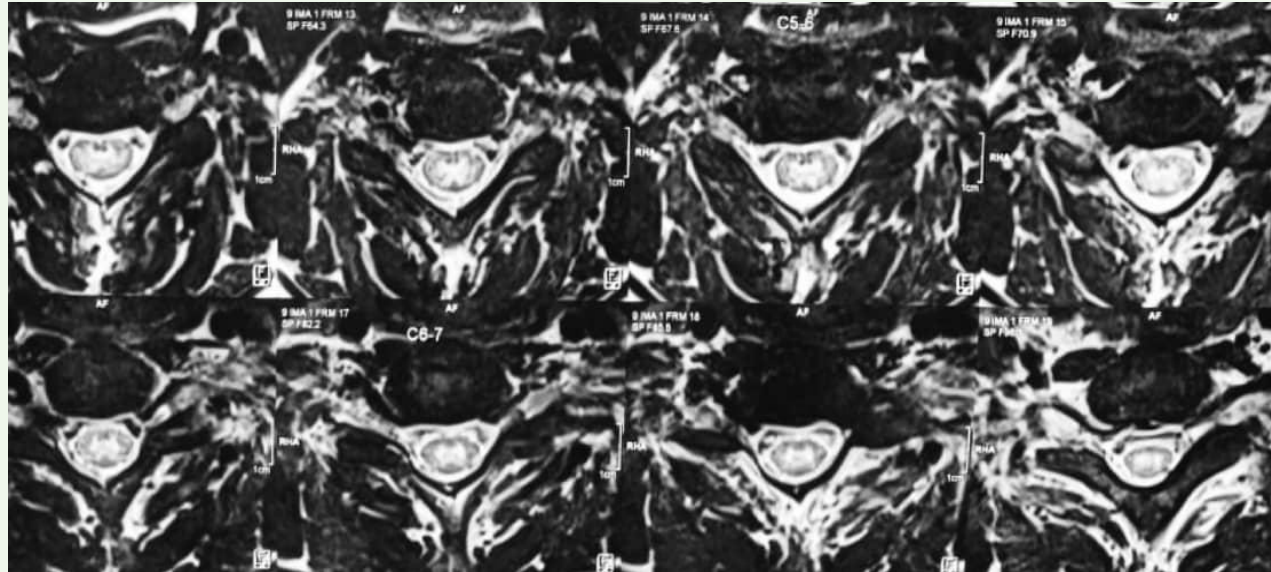
CASE REPORT

- We report a case of a 30-year-old previously healthy male, who developed acute symmetric sensorimotor paraparesis with bladder and bowel dysfunction, two weeks after recovering from chickenpox. MRI spine revealed long-segment cervico-dorsal myelitis, predominantly involving the central grey matter. CSF analysis was normal and varicella-zoster virus (VZV) PCR and antibodies were negative, ruling out direct viral myelitis.
- **INVESTIGATIONS:**



MRI Cervical spine Sagittal STIR image showing intramedullary hyperintense signal extending from C2 to D3

Serum MOGAD IgG: Positive



MRI Cervical spine Axial Section showing Bilateral Central Grey matter Hyperintensity.

CSF Cells:<5
Negative

CSF Sugars:55mg/dl

CSF VZV IgG and IgM:

CSF VZV DNA PCR: Negative

CSF VZV DNA PCR: Negative

Given the extent and pattern of cord involvement, MOGAD was suspected. Serum MOG-IgG returned positive, confirming the diagnosis. The patient was started on immunotherapy with good clinical improvement.

DISCUSSION

VZV is classically linked to direct viral myelitis/vasculopathy, but negative CSF PCR and antibodies excluded active infection.

The temporal relation with varicella and MRI features (long-segment cervico-dorsal, grey matter “H-sign”) supported autoimmune demyelination.

Normal CSF profile argued against viral myelitis, where pleocytosis and elevated protein are expected

Early differentiation between viral and autoimmune myelitis is critical to avoid therapeutic delays.