

# Pediatric multiple sclerosis presenting as area postrema syndrome

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The term “area postrema syndrome” refers to an episode of otherwise unexplained nausea and vomiting or hippus. It is considered a core clinical characteristic of neuromyelitis optica, but may be present in other neurologic conditions such as multiple sclerosis or posterior fossa tumors.

We present the case of a patient suffering a first demyelinating event presenting as “area postrema syndrome”.

A 10 year-old girl with no significant past medical history developed acutely incoercible nausea and vomiting. One week later she complained about double vision and instability. She had no previous history of other neurological symptoms, preceding illness or fever. Her examination was consistent with multidirectional nystagmus, marked dysmetria of the upper and lower extremities and incapacitating ataxia.

She was admitted to the hospital for further evaluation and management. Blood test results were within normal range. Extensive infectious and autoimmunity work up including aquaporin-4 and anti-MOG antibodies were negative. A brain MRI revealed multiple T2-hyperintensities in supratentorial subcortical areas, posterior fossa and brainstem; with gadolinium enhancement along the periaqueductal region. CSF analysis showed normal cell count, protein and glucose levels, with negative cultures and cytology. IgG oligoclonal bands (OCB) with elevated IgG-index were found.

The patient was treated with methylprednisolone and experienced rapid improvement. She was diagnosed with pediatric multiple sclerosis (MS) and started on interferon  $\beta$ 1a.

We conclude that patients suffering isolated and unexplained incoercible nausea and/or vomiting should be considered to have a neurologic substrate, and demyelinating disorders must be excluded. Based on this case report we show that clinical suspicion for an early diagnosis is mandatory to start a modifying therapy as soon as possible in MS since new relapses are expected [1-4].

## References

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