

## **Abstract**

Bickerstaff brainstem encephalitis (BBE) is an uncommon inflammatory and demyelinating condition, typically associated with a favorable prognosis. It is identified by the sudden onset of brainstem dysfunction, which often manifests a few days following an infection.

This is a rare syndrome characterized by a triad of ophthalmoplegia, ataxia, and reduced consciousness. It is regarded as a variant of both the Miller Fisher syndrome and Guillain-Barré syndrome. However, it stands apart from these two conditions due to its involvement of the central nervous system, often leading to impaired consciousness.

Here, we present the case of a middle-aged woman who exhibited the classic triad of ophthalmoplegia, ataxia, and reduced consciousness, ultimately diagnosed with Bickerstaff encephalitis. Her nerve conduction test revealed severe sensory motor polyneuropathy, and her cerebrospinal fluid (CSF) indicated elevated protein levels. After ruling out other potential differential diagnoses, we initiated treatment with intravenous immunoglobulin. However, her improvement was slow, prompting us to administer five cycles of plasmapheresis. Over the course of one month, she gradually improved and was discharged with only mild weakness in her lower limbs. Subsequently, we arranged for limb physiotherapy, and after two months, the patient showed near-complete recovery.

## **Key words**

Bickerstaff brainstem encephalitis, Miller Fisher syndrome, Guillain-Barré syndrome