Abstract

This case report presents a diagnostic challenge involving a 35-year-old woman who developed non-malignant N-methyl-D-aspartate receptor (NMDAR) positive autoimmune encephalitis without an associated malignancy. She exhibited a two-week history of altered behavior, neuropsychiatric symptoms, and fever, leading to a rapidly deteriorating clinical course, necessitating intensive care with ventilation and plasma exchange therapy. Despite the absence of an underlying malignancy, her condition was diagnosed based on positive NMDAR antibodies in cerebrospinal fluid (CSF) and suggestive MRI findings. The patient achieved complete remission after three months.

The case underlines the complexity and diversity of autoimmune encephalitis, particularly the varied clinical presentations and diagnostic challenges associated with NMDAR encephalitis not linked to tumors. The importance of early recognition, tailored management, and long-term surveillance, even in the absence of identified malignancies, is highlighted. Aggressive treatment strategies, including high-dose steroids, IVIG, and plasma exchange, in conjunction with multidisciplinary care, are pivotal for achieving favorable outcomes despite complicating factors such as sepsis. This report emphasizes the necessity of a comprehensive, individualized approach to managing this intricate neurological condition.