

Correspondence: a further case of opsoclonus–myoclonus syndrome associated with *Mycoplasma pneumoniae* infection

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Sir:

Huber et al. have reported the cases of three adolescents with opsoclonus–myoclonus syndrome (OMS) after *Mycoplasma pneumoniae* infection [2]. We report another such patient with OMS, who showed autoantibodies against glutamate receptors (GluR).

A 12-year-old girl, otherwise healthy except for bronchial asthma, presented with a 5-day history of jerky movements of her extremities and eyes and inability to walk. One week earlier, she had suffered from a respiratory disease, and at that time, the particle agglutination test for *M. pneumoniae* antibody was strongly positive ($>1:10,240$; titers of $\geq 1:40$ are regarded positive). Thorough examinations such as hematology, blood chemistry, electroencephalography, brain imaging, and cerebrospinal fluid (CSF)

examination revealed normal findings; no signs of neuroblastoma were observed.

Initially, the symptoms of OMS gradually improved. However, these symptoms worsened on day 28; therefore, intravenous immunoglobulin (IVIG) was administered at 2.0 g/kg. The symptoms of OMS began to improve within several days; however, they worsened around day 50. Therefore, IVIG was added at 1.0 g/kg, and intravenous methylprednisolone pulse therapy (30 mg/kg/day for three consecutive days) was administered three times at intervals of 1 week. The symptoms of OMS gradually disappeared by day 150 with no apparent sequelae.

GluR $\delta 2$ is predominantly expressed in cerebellar Purkinje cells; it plays a crucial role in cerebellar functions and is reportedly associated with cerebellitis [3]. On day 30, the serum was positive, but CSF was negative for anti-GluR IgG- $\delta 2$ and IgM- $\delta 2$ antibodies. These findings indicate that the etiological role of these antibodies is uncertain; however, they may be a surrogate marker of autoimmunity. Autoimmunity may play a role in OMS. Further studies are required to detect specific autoantibodies in cases of *M. pneumoniae*-related OMS [1].

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