

Atypical presentation of an atypical pneumonia: a case report

ABSTRACT

Background: Neurologic impediments occur in only 0.1% of *Mycoplasma pneumoniae* infections. Although direct intracerebral infection can occur in these patients, autoimmune-mediated reactions secondary to molecular mimicry are the most common pathophysiology of such neurological complications. These complications include immune mediated encephalitis, peripheral neuritis such as Guillain–Barré syndrome, and many others. Miller Fisher syndrome is a one of the variants of Guillain–Barré syndrome that has been rarely linked to *Mycoplasma pneumoniae* infection. It is a condition classically characterized by the triad of ophthalmoplegia, areflexia, and ataxia. Most patients with Miller Fisher syndrome will have positive anti-ganglioside GQ1b antibodies found in their serum, making this autoantibody a very useful serological confirmation parameter. We report a case of a Miller Fisher syndrome in a woman with *Mycoplasma pneumoniae* infection. To the best of the authors' knowledge, such cases have been only rarely described in literature. Case presentation: A 35-year-old Chinese woman presented with sudden onset of double vision and ataxia 5 days after fever and mild flu symptoms. Her *Mycoplasma pneumoniae* antigen was positive with 1 over 2560 titer of total mycoplasma antibody and presence of immunoglobulin M antibody, suggesting acute infection, and her nerve conduction study revealed mild sensory axonal polyneuropathy with segmental demyelination. the Miller Fischer syndrome variant of Guillain-Barré syndrome secondary to *Mycoplasma pneumoniae* was suspected and later confirmed by presence of serum anti-GQ1b autoantibody. She was treated with intravenous immunoglobulin 0.4 g/kg once daily for 5 days. Conclusions: The objective of this report is to share a case of an uncommon neurological complication of *Mycoplasma pneumoniae* infection, to increase the level of suspicion among clinicians that Miller Fischer syndrome can occur as an atypical presentation of an atypical pneumonia.