

Letter to editor: Dysgeusia as an initial manifestation of Miller-Fisher syndrome

Editor

Miller-Fisher syndrome (MFS) is an acute polyradiculoneuritis considered as a variant form of Guillain-Barré syndrome (GBS).¹ MFS accounts for about 5% of GBS cases.² The clinical triad of MFS is characterized by ophthalmoplegia, ataxia and areflexia.^{1,2} Diplopia and ataxia are the most common presenting manifestations of MFS.³ Here, we present a case in which an atypical initial presentation of this syndrome was observed.

A 49 year-old-woman with past medical history of hypothyroidism referred non-abrupt partial loss of taste sensation on the anterior part of her tongue, without other complaints. After twelve-hours, her symptoms progressed to mild dysarthria and perioral numbness. Approximately three days after her first complains, she was brought to our emergency department due to acute onset of gait unsteadiness, in association with progressive ascending paresthesia and paresis of upper and lower limbs. At admission, she denied history of infectious diseases or vaccination for the last preceding weeks. The general clinical exam was normal and her objective neurological exam was as follows: Alert and oriented to time, person and place; normal intrinsic and extrinsic ocular motility; mild bilateral facial palsy characterized by difficulty in blowing and showing teeth and eyebrow elevation in both sides; bilateral dysgeusia of the two anterior thirds of the tongue; bilateral hyperacusis; predominantly axial ataxia; global hyporeflexia (1+); flaccid tetraparesis (strength grade III in upper limbs and grade II in lower limbs). Her sensory and hearing exams showed no abnormalities. The first cerebrospinal fluid was normal.

On day two of hospitalization, she complained of dyspnea, horizontal diplopia and xerophthalmia. A new neurological evaluation disclosed left rectus medial palsy (Figure 1), bilateral Bell's sign (Figure 2) and global areflexia (except cubito-pronator reflex) as additional findings. On the same day, a second cerebrospinal fluid exam showed albumino-cytological dissociation (Protein level: 116mg/dL; Cells count: 0/mm³) and we opted for treatment with endovenous immunoglobulin (400mg per kilogram daily for five days). There was no need of mechanical ventilation through the following days. After properly treatment, an evident clinical improvement was observed. Dosage of GQ1B antibody was not made. Two weeks after discharge, she was able to walk five meters without assistance, but unable to run (score 2 on Hughes Functional Grading Scale).⁴



Figure 1 Left medial rectus palsy (right horizontal conjugate gaze).

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Figure 2 Bilateral Bell's Sign (bilateral facial nerve impairment).

In 1932, James Collier recognized a clinical triad of ophthalmoplegia, ataxia and areflexia. A classic paper describing this syndrome as a variant form of the GBS was published by Charles Miller-Fisher in 1956.⁵

Diplopia is the most common presenting symptom of MFS, however, a variety of other clinical manifestations have been documented in medical literature.^{3,6,7} In 2001, Mori et al.³ described the frequency of initial clinical manifestations of 50 MFS cases. In that research, 78% of cases presented with diplopia, 46% with ataxia, and 34% with the both. Other less common initial neurological manifestations were dysesthesia of the limbs (14%); blepharoptosis (2%), dysphagia (2%) and photophobia (2%).³

In 2007, Ito et al.⁷ published a study in which the frequency of initial symptoms of 466 MFS cases in Japan was as follows: Diplopia (65%); gait disturbance (32%); dysesthesia (14%); blepharoptosis (4%) and limbs weakness (2%).⁷ As is known, dysgeusia of the two anterior thirds of the tongue might occur as a consequence of facial nerve lesion, especially when there is impairment of one of its branches called intermedius nerve (or Wrisberg nerve).^{8,9} Dysgeusia as an initial manifestation of MFS is very rare.^{3,7}

This case serves to remind physician the fact that Miller-Fisher syndrome may have several forms of clinical presentation, since early recognition and treatment of acute polyradiculoneuritis are crucial for favorable clinical outcomes and good functional recovery.

Acknowledgements

To our Patients.

Conflict of interest

The author declares no conflict of interest.

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