we decided to administer nonhyperimmune IVIG in the face of a progressively worsening clinical status. Clinical improvement was rapid and constant during the course of treatment and resulted in almost complete recovery. We think that the benefit observed with IVIG treatment in this patient could have resulted from an immune-modulation effect—the same that has been observed in acute disseminated encephalomyelitis.

This is the first case, to our knowledge, of the use of IVIG to treat JE. Additional investigations and clinical trials are warranted before any recommendations should be made, but in our opinion, IVIG may prove to be useful when administered with symptomatic treatment for this deadly and invalidating disease.

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Telithromycin and Myasthenic Crisis

To the Editor—We read with interest the letter by Nieman et al. [1] about telithromycin and myasthenia gravis (MG). Aventis reported that several patients who had used telithromycin for treatment of respiratory infection had experienced exacerbations of already diagnosed MG, with 1 patient death [1].

We recently treated a 46-year-old white woman with MG and hypertension who presented to the emergency department with shortness of breath. She had recently visited her primary care physician and was given telithromycin for a sinus infection. While driving home, she experienced shortness of breath, which was sudden in onset, and she immediately sought medical attention. Her vital signs on presentation were blood pressure of 140/100 mm Hg, pulse of 120 beats/min, respiratory rate of 22 breaths/min, and pulse oximetry on room air of 94%. The initial treatment administered in the emergency department included methylprednisolone, diphenhydramine, and albuterol and ipratropium nebulized treatments for anaphylaxis. A review of her medications revealed the potential for exacerbation in MG. CT was performed on day 2 of hospitalization, and the results were negative for thymoma. The patient remained in the medical intensive care unit for 5 days, and she was discharged from the hospital after 8 days of hospitalization.

MG is an antibody-mediated autoimmune attack directed against nicotinic acetylcholine receptors at the neuromuscular junction. These antibodies cause a reduction in acetylcholine receptors, resulting in the inability to sustain or repeat neuromuscular contractions. The cardinal features are weakness and fatigability of skeletal muscles. If respiratory weakness becomes severe enough to require mechanical ventilation, the patient is said to be in myasthenic crisis [2].

Several drugs have been identified that interfere with neuromuscular transmission. Symptoms commonly occur several hours to days after exposure to the drug. Common antibiotic classes that have been associated with myasthenic crisis include aminoglycosides, macrolides, $\beta$-lactams and monobactams, and quinolones. Extensive reviews of drugs that affect neuromuscular transmission are available elsewhere [3, 4].

Telithromycin (Ketek; Aventis) was the
first member of the ketolide antibiotic class, and it received approval from the US Food and Drug Administration in 2004 [5]. The manufacturer recently released a statement that warned clinicians to exercise extreme caution when giving telithromycin to patients with MG. The warning from Aventis Pharma Deutschland reported that several patients who had used telithromycin for respiratory infections had experienced exacerbations of already diagnosed MG, with 1 patient death. According to the report, patients experienced an intensification of muscle weakness, dyspnea, or “heavy breathing” within hours after taking telithromycin [6]. A review of the Aventis safety database revealed 8 cases of MG exacerbation [1].

Although our patient did receive succinylcholine and vecuronium (neuromuscular blocking agents), her symptoms began to appear immediately after she ingested telithromycin. Telithromycin is not recommended for patients with MG [5]. This case illustrates that clinicians should be aware of this potential adverse effect and differentiate between myasthenic crisis versus reactions resembling anaphylaxis.

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References


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