

THERAPEUTIC OPTIONS USED FOR MYASTHENIA GRAVIS

Clinical and economic outcomes following plasma exchange (PLEX) and intravenous immunoglobulin (IVIG) in 1,606 hospitalized adult patients with myasthenia gravis (MG) were compared in a study at Case Western Reserve University, Cleveland, OH; St Louis University, MO; and University of Alabama, Birmingham, AL. The cohort was identified from the Nationwide Inpatient Sample database for 2000-2005. Mean age was approx 50 years. MG crisis patients (n=698) had higher mortality and complication rates, and those receiving PLEX (n=529) had significantly more complications than those receiving IVIG (169). Mortality and complication rates of the treatment groups did not differ significantly in the whole cohort. Respiratory, cardiac, or renal failure was associated with increased mortality, and age and respiratory failure with increased complication rate. Patients receiving PLEX had longer length of hospital stay and higher inpatient costs. Compared to PLEX, patients treated with IVIG have similar clinical outcome and lower costs of hospitalization. Elderly and those with acute respiratory or cardiac failure may respond better to IVIG. (Mandawat A, Kaminski HJ, Cutter G, Katirji B, Alshkhlee A. Comparative analysis of therapeutic options use for myasthenia gravis. *Ann Neurol* Dec 2010;68:797-805). (Respond: Dr Alshkhlee, Department of Neurology and Psychiatry, St Louis University, 1438 S Grand Blvd, St Louis, MO 63104).

COMMENT. Miller RG, Barohn RJ, and Dubinsky R, in an editorial, agree that IVIG and PLEX appear to be equivalent in efficacy, and IVIG may be preferable in tolerability and hospital costs. (*Ann Neurol* 2010;68:776-777). They outline the major therapeutic advances: physostigmine and thymectomy (1930s), mechanical ventilation (1950s), corticosteroids and PLEX (1960s), azathioprine (1960s to 1970s), cyclosporine (1980s), IVIG (1980s to 1990s), and mycophenolate mofetil (1990s to 2000s). They note similarities between treatment of MG and Guillain Barre syndrome and chronic inflammatory demyelinating polyradiculoneuropathy, with respect to the efficacy of IVIG and PLEX. The response to thymectomy is not discussed, except that in adults it is disappointing and under investigation by controlled trial.

Tracy MM and colleagues at Children's Memorial Hospital, Chicago, reported a "Graded response to thymectomy in 13 children with MG" (*J Child Neurol* 2009;24:454-459). Thymectomy was considered an effective treatment in 62% of this series, and remission was complete with no medication in 31%. A review of the literature from 1960 to 2009 uncovered 18 articles concerning response to thymectomy in children with MG, and a total of 479 patients of whom 68% showed improvement and 39% had discontinued medication.

INFECTION-RELATED DISORDERS

KLIVER-BOCY SYNDROME AFTER MENINGOENCEPHALITIS

Researchers at Medical College of Georgia, Augusta, GA, report a 10-year-old girl with a history of *Listeria monocytogenes* meningoencephalitis, contracted at 2½ years of age, who developed behavioral changes consistent with Kluver-Bucy syndrome