

Myasthenia gravis treated in the neurology intensive care unit: a 14-year single-centre experience

Abstract

Introduction

Severe myasthenia gravis (MG) exacerbation with respiratory failure and/or dysphagia usually requires monitoring and treatment in the neurology intensive care unit (NICU). The aim of our study was to identify all patients with severe MG exacerbation treated in the NICU in order to assess potential factors affecting patients' need for mechanical ventilation, occurrence of complications and the final outcome.

Methods

We retrospectively included all patients with severe exacerbation of MG who required management in the NICU during a 14-year period. Baseline sociodemographic and clinical features, data on medication, comorbidities and outcome were obtained by reviewing medical records and institutional databases.

Results

Our study comprised 130 severe MG exacerbations detected in 118 patients. Median age of patients was 61.5 years, and women accounted for 58.5% of the patients. Half of the patients required mechanical ventilation during hospitalization. Lethal outcome was observed in 12.3% of severe MG exacerbations. Only elder age was an independent negative predictor of survival (OR 0.89, 95% CI 0.82–0.97, $p < 0.01$). Complications during hospitalization were detected in 50% of patients. A higher number of comorbidities (OR 1.09, 95% CI 1.60–2.35, $p = 0.01$) and mechanical ventilation (OR 28.48, 95% CI 8.56–94.81, $p < 0.01$) were independent predictors of complications during hospitalization.

Conclusion

Patients with a severe MG exacerbation who do not require mechanical ventilation have a good outcome after treatment in the NICU. Elder age is an independent predictor of lethal outcome in patients with severe MG exacerbation. Mechanical ventilation and a higher number of comorbidities lead to more frequent complications.