Myasthenia gravis associated with Good's syndrome: a case report and review of literature

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Abstract

Background: Good's syndrome (GS) is a rare secondary immunodeficiency disease associated with thymoma, which is characterized by chronic recurrent infection. Due to abnormal immune function, more than half of GS are complicated with autoimmune diseases, such as myasthenia gravis (MG) and pure red cell aplastic anemia (PRCA).Case presentation: We report a case of type III late-onset myasthenia gravis (MG) with thymoma, which was gradually improved after mechanical ventilation, Intravenous steroid pulse, intravenous immunoglobulin , and tacrolimus. After weaning, the patient had a repeated myasthenia gravis crisis caused by lung infections, urinary tract infections, bacteremia, and septic shock, resulting in difficulty in weaning. The subsequent immunological evaluation showed hypogammaglobulinemia, decreased B lymphocytes , and an inverted proportion of CT4+/CD8+ cells, which confirmed the diagnosis of GS.Conclusions: GS should be strongly suspected and immunological examinations performed when recurrent opportunistic infections occur in patients with MG associated thymoma. Early identification and intravenous administration of immunoglobulin can reduce the incidence of future infection and improve the prognosis.We summarize 16 previously reported cases of MG patients with GS. The average age of onset of MG was 53 ±18 years old, and the ratio of male to female was roughly equal. Mostly manifested as systemic myasthenia gravis (77%), half of the patients had bulbar paralysis, 15% had myasthenia gravis crisis, and only 8% only involved extraocular muscles. Thymomas of type B and Type A were the most common. GS symptoms improved in 7 of the 10 patients, suggested thymectomy played a positive role.

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