# AB011. Rescue chemotherapy in a patient with thymoma and severe symptoms of myasthenia gravis: a case report

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Abstract: Thymomas often co-exist with myasthenia gravis (MG). The exacerbation of MG can be related to the thymoma progression, surgery or chemotherapy. We are presenting a case of a thymoma patient effectively treated with a rescue chemotherapy due to aggravated symptoms of MG. The 50-year-old female presented the symptoms of MG. Radiologically thymic tumor was detected and the patient underwent video thoracoscopic thymectomy. Type B2, Masaoka-Koga stage II thymoma, pR0 was diagnosed. The patient did not approve adjuvant radiotherapy. Neurological symptoms were controlled by pyridostigmine for 15 months, then exacerbated—speech impairment, dysphagia, muscular fatigue and shortness of breath occurred. CT scan revealed a pleural dissemination of the thymoma. Despite immunoglobulin and prednisone therapy, respiratory failure progressed, and the patient required mechanical ventilation and plasmapheresis. Temporary clinical improvement was achieved. Then the patient again required mechanical ventilation, plasmaphereses, higher doses of pyridostigmine and prednisone. The symptoms diminished, but the patient performance status was moderate (ECOG 3), still presented bulbar symptoms and needed a home-care respirator and enteral nutrition (PEG).

An X-ray scan revealed the regression of tumors (an effect of the prednisone treatment). The patient was qualified to rescue chemotherapy: cisplatin-etoposide. Stabilization of the disease was achieved (RECIST 1.1) with significant improvement of neurological condition. Three weeks later the patient could cease using the respirator and started to eat blended meals. After 3 courses of chemotherapy, the patient underwent re-thoracotomy and multiple pleural and mediastinal tumors were removed. The tumors revealed combined morphology of type B3B2 thymoma. No aggravation of MG symptoms was observed in the perioperative period. Within the next 4 years of followup the thymoma relapsed 3 times and all episodes were accompanied by severe myasthenic crises with respiratory failure requiring periodic ventilation. The recurrences were treated surgically and by two lines of palliative chemotherapy: paclitaxel/carboplatin, doxorubicin/ cyclophosphamide. Currently, the patient is in good condition, ECOG 1. The regression of the tumor achieved due to high doses of prednisone and chemotherapy led to significant clinical improvement of neurological symptoms. Patients with thymomas accompanied by MG need multidisciplinary care and close collaboration of surgeons, oncologists, neurologists and anesthesiologists.

Keywords: Myasthenic crisis; thymoma; chemotherapy

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## Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

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