CASE REPORTS

Total remission of thymus carcinoma after treatment with intravenous immunoglobulin

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We report the case of a 42 year-old woman with myasthenia gravis associated with a malignant thymoma. Despite surgery, chemotherapy and radiotherapy, the thymoma showed soft tissues, pleural and mediastinic progression. Unexpectedly, a complete remission of the thymoma was confirmed by FDG-PET after four cycles of immunoglobulins, administered as treatment for a myasthenic crisis. To our knowledge this is the first case report of complete remission of a malignant thymoma with immunoglobulin therapy.

Key words: thymoma, immunoglobulins, treatment.


Aproximately 30% of patients with thymus carcinoma or thymoma are asymptomatic at the time of diagnosis 1. The main clinical symptoms are cough, thoracic pain and congestion of superior respiratory airways. There are also patients with thymoma in which the first clinical expression is an autoimmune paraneoplastic syndrome. The most frequent paraneoplastic syndrome associated with thymoma is myasthenia gravis, and less frequently, polymyositis, erythematous lupus, rheumatoid arthritis, thyroiditis, Sjögren's syndrome, autoimmune pure red cells aplasia and hypogammaglobulinemia2-3. Autoimmune diseases related to thymoma are due to an alteration in the subgroup of circulating T cells4-5.

In this report we describe the case of a 42 year-old woman who, in April 1996, developed: subacute dysarthria, blurred vision, intermittent palpebral pro-
Care Unit. Two cycles, of five days each, with intravenous immunoglobulins (2 mg/kg), were administered, improving her myasthenic symptoms. Patient was discharged to Neurology Unit where two more immunoglobulin cycles were administered resulting in a spectacular improvement of her myasthenic symptoms. Unexpectedly a FDG-PET scan confirmed the complete remission of the tumoral lesions (fig. 2). Currently, one year after the complete remission, she still shows mild diplopia and muscular weakness without evidence of tumoral disease.

The treatment of autoimmune diseases associated with thymoma consists of radical surgery of the tumor. However, when there is metastatic disease, chemotherapy treatment is the rescue option. In some cases, as in this report, the persistence of autoimmune symptoms, despite surgery and chemotherapy, make the use of immunosuppressive or immunomodulatory drugs necessary. Surprisingly, in the case reported here, the tumor progressed despite different chemotherapeutic regimes. However, a complete and long-lasting remission and a substantial improvement of the myasthenic symptoms was achieved after administering immunoglobulins.

Our hypothesis is that the immunoglobulin-based treatment allows the inhibition of antiapoptotic stimulus in thymoma. To our knowledge, this is the first case report where a complete remission of thymoma...