

Precursor B-cell acute lymphoblastic leukemia after thymoma and myasthenia gravis: report of a case and review of the literature

Hung Chang^{1,2}, Tong-Jong Chen³, Wen-Yu Chuang^{2,4}, and Tung-Liang Lin^{1,2}

¹Division of Hematology-Oncology, Chang Gung Memorial Hospital, Taoyuan; ²College of Medicine, Chang-Gung University, Taipei; ³Department of Pathology & Laboratory Medicine, Shin Kong Wu Ho-Su Memorial Hospital, Taipei; ⁴Department of Pathology, Chang Gung Memorial Hospital, Taoyuan, Taiwan

ABSTRACT

The association of thymoma, myasthenia gravis (MG) and pure red cell aplasia (PRCA) is well recognized. The association of T-cell lymphoblastic lymphoma and thymoma/MG/PRCA is less distinctive but reported occasionally. We present a 35-year-old female patient who was diagnosed with thymoma and myasthenia gravis. She underwent a thymectomy shortly after the diagnosis. One year later she developed precursor B-cell acute lymphoblastic leukemia (ALL). Complete remission was achieved after induction chemotherapy but the disease relapsed and she expired two years after the diagnosis of ALL despite allogeneic stem cell transplantation. This association has never before been reported and the pathogenesis needs to be clarified. Aberrant thymus function in myasthenia gravis, immunosuppressive therapy and thymectomy are considered to account for the leukemia development in this patient. Free full text available at www.tumorionline.it

Key words: acute lymphoblastic leukemia, myasthenia gravis, thymoma, thymectomy.

Grant support: This work was supported by grant No. DOH99-TD-C-111-006 from the Department of Health, Taiwan.

Correspondence to: Dr. Tung-Liang Lin, Division of Hematology-Oncology, Chang Gung Memorial Hospital, 5 Fu Hsing Road, Gueishan Shiang, Taoyuan, Taiwan, ROC.
Tel +886-3-3281200 ext. 2524;
fax +886-3-3286697;
e-mail ld2605@adm.cgmh.org.tw

Received July 28, 2009;
accepted June 1, 2010.