Salvage Chemotherapy for Recurrent Invasive Thymoma

To the Editor:

Lara and coworkers (October 1996) reported the first two cases of successful retreatment of recurrent invasive thymoma with platinum, doxorubicin, and cyclophosphamide. Since thymomas are rare tumors and no standard salvage chemotherapy exists, we wish to report the case of a patient in whom chemotherapy achieved major responses in three subsequent unresectable recurrences. This case allows a few additional suggestions.

In December 1986, a 30-year-old white man was operated on for a stage III lymphoepithelial thymoma and then received radiotherapy (41 Gy). In April 1993, a CT scan documented a bulky mediastinal recurrence and massive right pleural metastases, confirmed by biopsy. Seven courses of chemotherapy (cis-platinum 50 mg/m², doxorubicin 50 mg/m², and cyclophosphamide 500 mg/m²) were administered. Only a slight thickening of the pleura was evident at CT scan after four courses and at CT and MRI scans after the completion of the program in November 1993.

Mediastinal and pleural progressive disease was first noticed on CT scan in March 1994; it was fully evident in a scan performed the following August, but was still not symptomatic. In November, chemotherapy was restarted with cis-platinum 70 mg/m² and cyclophosphamide 700 mg/m²; doxorubicin was omitted to avoid cardiotoxicity because of a previous cumulative dose of 350 mg/m² and previous radiotherapy involving the heart. After four courses, in March 1995, a CT scan revealed a subtotal regression. Shortly thereafter, a thoracotomy was performed and a few thin pleural foci were removed.

In the following June and September, CT scans showed a third progressive pleural recurrence. Third-line chemotherapy was started with ifosfamide (2.25 g/m² on days 1 and 2), cis-platinum (40 mg/m² on days 3 to 5), and etoposide (100 mg/m² on days 3 to 5). After only one course, a CT scan revealed an objective response of more than 50%. Two other courses were administered, after which the patient was offered a program of dose intensification. A course of ifosfamide 10 g/m², carbo-platinum 1,350 mg/m², and etoposide 1,200 mg/m² was administered over 3 days. Autologous bone marrow transplantation was tolerated without major problems and again produced a subtotal tumor regression documented by CT scan in April 1996. After surgical removal of an isolated pleural recurrence in September 1996, the patient was well and disease-free in December 1996.

The results observed in our patient allow us to make several observations. First, second-line and even third-line chemotherapy can be successful in recurrent thymoma.

Second, extending the work by Lara and colleagues, we found that a major response is possible on retreatment, even after a disease-free interval of less than 12 months.

Third, doxorubicin may not be necessary to the activity of the platinum-doxorubicin-cyclophosphamide regimen.

Fourth, ifosfamide and etoposide, combined with platinum, were highly active in our heavily pretreated case. A similar combination was reported as marginally active in three pretreated patients. However, platinum and etoposide chemotherapy has recently proved to be an effective regimen in advanced thymoma. In two cases, a partial response was obtained on retreatment.

Fifth, supramaximal chemotherapy may be a valuable additional option in selected cases and is worthy of further evaluation, even if eradication of the disease was not achieved in our patient.

References

1. Lara PN, Bonomi PD, Faber LP. Retreatment of recurrent invasive thymoma with platinum, doxorubicin, and cyclophosphamide. Chest 1996; 110:1115-17