LETTERS TO THE EDITOR

Mediastinal lymph node metastasis in patients with clinical stage I lung cancer

To the Editor:

I read the recent article by Takizawa and associates¹ regarding mediastinal lymph node metastasis in patients with clinical stage I peripheral non-small-cell lung cancer (NSCLC) with great interest. This important study in 575 patients nicely demonstrates that even in clinical stage I NSCLC, 14% of patients have N2 disease, moving them into stage IIIA. In 68% of these N2 cases, the surgeon could not detect the lymph node metastases by macroscopic examination, a fact that stresses the importance of complete nodal sampling.

However, it is surprising that in the discussion the authors do not address the role of mediastinoscopy in preoperative staging of lung cancer. When looking carefully at Tables III to VII, I observed a total of 79 patients with N2 disease; in 61 patients (77.2%) these N2 nodes were accessible by cervical mediastinoscopy and in 16 patients (20.3%) by left anterior mediastinoscopy. If routine cervical mediastinoscopy had been performed for right-sided tumors, and combined with an anterior or extended mediastinoscopy for left-sided tumors, 77 of 79 or 97.5% of these N2 metastases would have been detected before the operation. The accuracy of mediastinoscopy has been shown to be 95% for superior mediastinal involvement.² Another advantage of mediastinoscopy is contralateral sampling of lymph nodes, which detects possible N3 disease. Inasmuch as contralateral node sampling is difficult by way of a lateral thoracotomy, some patients in the study by Takizawa's group, especially those with multilevel N2 disease, could have had N3 and thus stage IIIB disease.

Recently, the role of mediastinoscopy has become more important because surgery is no longer advocated as primary treatment for NSCLC with histologically proved N2 involvement. Because overall survival in these patients is very poor, many of them are treated by induction chemotherapy.^{3,4} It would be interesting to know the overall survival data of the 79 patients with N2 disease in the study by Takizawa's group,¹ in which none of the patients had preoperative mediastinoscopy and all were treated by primary surgery. In my opinion, mediastinoscopy should be performed routinely for correct staging of NSCLC, because the accuracy of present-day computed tomographic scanners in mediastinal staging remains low.⁵ Primary consideration should be given to induction chemotherapy in patients with N2 involvement, avoiding primary surgical treatment.

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Reply to the Editor:

We appreciate Dr. Van Schil's investigation of the data with regard to our patients with N2 disease. His investigation shows us that 97.5% of the N2 metastases of our patients would have been detected in the preoperative period if cervical or anterior mediastinoscopy had been performed. We realize that Dr. Van Schil recommends performing mediastinoscopy to detect N2 disease before thoracotomies. We do not agree with his recommendation. We did not perform mediastinoscopy in our patients with clinical stage I lung cancer because the negative predictive accuracy for mediastinal lymph node metastasis with the use of computed tomography is high.^{1,2} Each patient in our article had clinical stage I lung cancer, which was assessed through computed tomography. No patients had enlarged mediastinal lymph nodes suggestive of N2 disease. We would have had to perform mediastinoscopy on all patients with clinical stage I lung cancer to detect N2 disease among them. If we had done so, 496 of 575 patients (86%) would have been subjected to a needless invasive operation. Therefore we think that the practicality of performing mediastinoscopy on all patients with clinical stage I lung cancer merits further debate.

Dr. Van Schil asked about the overall survival data of the 79 patients with N2 disease in our study. We followed up all of our 79 patients with N2 disease. Their overall survival, calculated by means of the Kaplan-Meier method, was estimated to be 26% at 5 years. Each death decreased the proportion surviving in our calculations, regardless of the cause of death. Although we believe that our surgical treatment for patients with N2 disease is