

## LETTERS TO THE EDITOR

### Pulmonary infiltrates following bone marrow transplantation

We read with interest the paper by Dr J H Campbell and colleagues (December 1993;48:1248-51) investigating the value of bronchoscopy and bronchoalveolar lavage in patients receiving immunosuppressive therapy during bone marrow transplantation.

We have recently conducted a similar retrospective study of patients referred to us for bronchoscopy from our renal unit over a 30 month period. Out of a total of 40 referrals 16 patients were identified as receiving immunosuppressive therapy either for their renal disease or for a transplant. A diagnosis was made in eight of these: cytomegalovirus pneumonitis (3), pneumocystis pneumonia (2), candida pneumonitis (1), invasive aspergillosis (1), and bacterial pneumonia (2). An adenocarcinoma was found at lobectomy in one patient. No opportunistic infections were subsequently identified in the remaining seven patients (median follow up 7.5 months).

If the diagnosed condition is essentially untreatable - for example, disseminated aspergillosis - then bronchoscopy and bronchoalveolar lavage will not alter the outcome. Nevertheless, in our series not all the diagnoses proved to be untreatable. This may be partly because in renal transplantation immunosuppression may be withdrawn, saving the patient by sacrificing the transplant.

In our patients, unlike those of Campbell *et al*, a negative result reliably excluded opportunistic infection allowing potentially toxic treatments to be discontinued. Our data confirm the usefulness of bronchoscopy and bronchoalveolar lavage in patients with renal failure receiving immunosuppressive therapy.

MICHAEL POLKEY  
JIGNESH PATEL  
P JOHN REES  
*Department of Thoracic Medicine,  
Guy's Hospital,  
London SE1 9RT,  
UK*

### Surgical resection for small cell lung cancer

Dr EF Smit and others (January 1994;49:20-2) report a retrospective review of survival in 21 patients with small cell lung cancer (11 stage I, three stage II, seven stage IIIA) who underwent surgical resection. Median survival was 29 months, 40 months for patients with stage I or II disease, and 20 months for those with stage IIIA. They conclude from their results and those of others that curative resection offers the best chance for long term survival in patients with small cell carcinoma

of the lung with very limited stage disease. Such a firm conclusion is warranted neither by their own findings nor by those of other retrospective series and prospective studies, for the following reasons.

Survival data based on such a small number of patients have such wide confidence intervals that no firm conclusions can be drawn from them. Using information extracted from their figure we estimate a 95% CI of 16-43 months for overall median survival. Their results, together with the others they mention, do indeed suggest that surgical resection is associated with long term survival rates of around 50% in the small and highly selected group of carefully staged patients deemed to have potentially resectable stage I or II disease. Nevertheless, in only one of the studies they quote was an unconfounded comparison made between resection and no resection in a randomised trial. This was the trial conducted by Lad and colleagues<sup>1</sup> who randomised 144 patients, all of whom had received and responded to chemotherapy, to subsequent resection or no resection. They found no difference in survival between the two groups.

Another important reason for being cautious about the possible role of surgical resection in the treatment of small cell lung cancer is that other groups are reporting increasingly promising long term survival rates in patients with limited disease and good performance status treated with intensive chemotherapy and thoracic radiotherapy without surgery.<sup>2,5</sup> Such improvements have recently been reviewed by Aisner and Belani<sup>6</sup> (see, in particular, pp 386-8 of their review).

At present it is wise to conclude that there is still uncertainty about whether surgical resection can improve upon the results of other treatment modalities. Resolution of this uncertainty, and measurement of the size of any possible benefit from resection, requires the trial by Lad and colleagues to be supplemented by large randomised trials making unconfounded comparisons between resection and no resection: trials in which control regimens include the currently best available combinations of intensive chemotherapy and thoracic radiotherapy.

DAVID J GIRLING  
DAVID MACHIN  
RICHARD J STEPHENS  
*MRC Cancer Trials Office,  
5 Shaftesbury Road,  
Cambridge CB2 2BW,  
UK*

- Lad T, Thomas P, Piantadosi S, for the Lung Cancer Study Group. Surgical resection of small cell lung cancer: a prospective randomised evaluation. *Lung Cancer* 1991;7(Suppl): 162, abstract 604.
- Le Chevalier T, Arriagada R, Baldeyrou P, De Cremoux H, Ruffie P, Martin M, *et al*. Chemo-radiotherapy combination in small cell lung carcinoma. *Bull Cancer* 1987;74:559-64.
- Thatcher N, Lind M, Stout R, Payne C, Carroll KB, Campbell C, *et al*. Carboplatin, ifosfamide and etoposide with mid-course vincristine and thoracic radiotherapy for 'limited' stage small cell carcinoma of the bronchus. *Br J Cancer* 1989;60:98-101.
- Johnson DH, Turrisi AT, Chang AY, Blum R, Bonomi P, Ettinger D, *et al*. Alternating chemotherapy and twice-daily thoracic radiotherapy in limited-stage small-cell lung cancer: a pilot study of the Eastern Cooperative Oncology Group. *J Clin Oncol* 1993; 11:879-84.
- Bleehen NM, Girling DJ, Gregor A, Leonard RCF, Machin D, McKenzie CG, *et al* on behalf of the Medical Research Council Lung

Cancer Working Party. Can long-term survival be improved in patients with small cell lung cancer (SCLC) and good performance status? *Br J Cancer* (submitted).

- Aisner J, Belani CP. Lung cancer: recent changes and expectations of improvements. *Semin Oncol* 1993;20:383-93.

**AUTHORS' REPLY** We are grateful to Dr Girling and his colleagues for their comments on our report. We agree with their conclusion that at present it is wise to conclude that there is uncertainty about the exact role of surgery in the management of small cell carcinoma of the lung. No doubt surgeons will continue to operate on small peripheral nodules, only to find on pathological examination that a small cell carcinoma was resected. In our study seven such patients were included.

Whether patients with a known preoperative diagnosis of stage I or II small cell carcinoma should be operated upon is therefore the issue of concern. As pointed out by Girling *et al*, with intensive chemoradiotherapy programmes increasingly promising long term survival rates are reported which are in the same range as the median and long term survival reported in our study. The intention of such programmes is to deliver maximum cytotoxic therapy to the primary site, therefore enhancing local control without compromising the chemotherapy dose intensity needed for systemic control. For two reasons surgery (with adjuvant chemotherapy) may be preferred to chemoradiotherapy. Firstly, the reported local failure rate observed in such programmes may be as high as 28%<sup>1</sup> while with surgery this figure may be as low as 8%.<sup>2</sup> Also, only patients with good performance status are able to tolerate intensive chemoradiotherapy programmes making surgery a good alternative for the average elderly patient with small cell lung cancer.

Again we agree with Girling and colleagues that a randomised trial comparing initial resection (as opposed to adjuvant surgery as in the trial by Lad *et al*)<sup>1</sup> followed by chemotherapy with the currently best available combinations of intensive chemotherapy and thoracic radiotherapy would be the best way to resolve this issue. Preferably such a trial should include data collection on quality of life which may be quite different between two such treatment policies. A direct comparison between conventional treatment and surgery is, however, difficult since limited disease small cell lung cancer includes patients with stages IIIa and IIIb where primary surgery would not be considered. Until such a study is performed we recommend resection of apparently operable patients with small cell lung cancer followed by chemotherapy.

P E POSTMUS  
E F SMIT  
*Department of Internal Medicine,  
Martini Hospital,  
PO Box 30033,  
9700 RM Groningen,  
The Netherlands*

- McCracken JD, Janaki LM, Crowley JJ, Taylor SA, Shankir Giri PG, *et al*. Concurrent chemotherapy/radiotherapy for limited small-cell lung carcinoma: a Southwest Oncology Group Study. *J Clin Oncol* 1990;8:892-8.
- Shepherd FA, Ginsberg RJ, Feld R, Evans WK, Johansen E. Surgical treatment for limited small-cell lung cancer. The University of Toronto lung oncology group experience. *J Thorac Cardiovasc Surg* 1990;101:385-93.
- Lad T, Thomas P, Piantadosi S. Surgical resection of small cell lung cancer: a prospective randomized evaluation. *Lung Cancer* 1991;7(Suppl): 162, abstract 604.