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LUNG ALERT

Bronchoscopy in haematopoietic stem cell transplant recipients may not be beneficial

▲ Hofmeister CC, Czerlanis C, Forsythe S, *et al*. Retrospective utility of bronchoscopy after hematopoietic stem cell transplant. *Bone Marrow Transplant* 2006;**38**:693–8.

Haemopoietic stem cell transplant (HSCT) recipients have a high rate of pulmonary complications, and bronchoscopy is traditionally felt to be beneficial as part of diagnostic examination. This was a retrospective review of HSCT patients in a single institution who had undergone bronchoscopy over a 10-year period; it aimed to assess whether alterations in management based on bronchoscopy results led to a survival advantage.

Of 1651 HSCTs that were performed, two-thirds were autologous; 190 patients were admitted for pneumonia and 101 bronchoscopies were performed, but complete records were only available for 91 episodes in 78 patients. Forty nine per cent of bronchoscopies gave a probable diagnosis, with the commonest organisms isolated being *Aspergillus*, cytomegalovirus, Gram-negative bacteria and other viruses. All patients were on prophylactic antibacterial, antifungal, antipneumocystis and antiviral treatment.

The overall median survival after bronchoscopy was 35 days with no statistically significant difference in survival between bronchoscopies, which yielded a diagnosis (infective or otherwise) compared with those that did not (29 vs 46 days, $p = 0.165$), nor between those in which diagnosis led to a change in treatment or not (31 vs 24 days, $p = 0.546$). Complications occurred in seven of 91 bronchoscopies, 6 of which involved bleeding after transbronchial biopsy. The additional yield of transbronchial biopsy over bronchoalveolar lavage was only 5%, and the authors therefore do not recommend performing transbronchial biopsy. Overall, the benefit of bronchoscopy in HSCT recipients is questioned.

The study was limited by selection bias, relatively small numbers and the retrospective, single centre design. Further, prospective studies in other centres are needed to better characterise the benefit of bronchoscopy in this patient group.

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