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- 3 Robinson DS, Cunningham DA, Dave S, Fleming J, Mitchell DM. Diagnostic value of lung clearance of ^{99m}Tc DPTA compared with other non-invasive investigations in *Pneumocystis carinii* pneumonia in AIDS. *Thorax* 1991;46:722-6.

Pathological assessment of mediastinal lymph nodes in lung cancer: implications for non-invasive mediastinal staging.

Dr K M Kerr and colleagues claimed that malignant mediastinal lymph nodes are not larger than benign nodes in patients with lung cancer (May 1992;47:337-41). This surprised us as it differs from other results in the literature.¹⁻³

We assessed 158 mediastinal lymph nodes resected from 37 cases of primary lung cancer and found the size of the lymph node to be significantly related to the presence of malignant disease. The largest lymph nodes were malignant in 34/37 cases (92%), including nodes in the lung parenchyma. The malignancy rate was 14% (1/7) for nodes less than 5 mm in diameter, and 89% (8/9) for those larger than 20 mm ($p < 0.001$). Lymph node diameter less than 5 mm or larger than 20 mm therefore has a high predictive value. The malignant rates for nodes larger than 5, 10, and 15 mm in diameter were 24% (37/151), 37% (30/82), and 53% (15/28), respectively. A high rate of false positive or false negative results was present when both thresholds of 15 and 20 mm or more were used in the diagnosis of nodes between 10 and 19 mm in diameter.

We have reason to believe that metastatic disease is the most important factor influencing the size of lymph nodes, and the larger the lymph node the more probable is the presence of malignant disease. One cannot predict, however, the nature of a lymph node only by its size obtained by imaging. We agree with Dr Kerr that computed tomography can be used to guide lymph node sampling before operation, and mediastinoscopy should be recommended to every patient with lung cancer, whether the mediastinal lymph nodes are enlarged or not.

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- 2 Whittlesey D. Prospective computed tomographic scanning in the staging of bronchogenic cancer. *J Thorac Cardiovasc Surg* 1988;95:876-82.
- 3 Goldstraw P. The practice of cardiothoracic surgeons in the perioperative staging of non-small cell lung cancer. *Thorax* 1992;47:1-2

AUTHORS' REPLY It is difficult to assess the study by Drs Ren and Xu without knowledge of the operative techniques and lymph node sampling procedures employed. Their results are based on fewer patients and

fewer nodes than in our study. Their statistical analysis is based only on 16 lymph nodes, with only nine nodes greater than 20 mm in diameter of which eight were malignant in comparison to 43 nodes greater than 20 mm in our study of which 10 were malignant.

Drs Ren and Xu express surprise with our results as they differ from others in the literature, and quote certain papers. We would caution the reader to consider whether comparison of some results is justified. We again emphasise that much of the literature, and that most often quoted, considers measurements made on computed tomographic scans; our data and only very few others (and presumably those of Drs Ren and Xu) are derived from measurement of lymph node specimens in the pathology laboratory.

Although we could not find any significant relationship between lymph node size and the presence of malignancy, the major message of the two studies is the same, namely that computed tomographic scanning can only be used to guide lymph node sampling and not to indicate the presence of metastases.

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Guidelines for care during bronchoscopy

These guidelines have been prepared by the Standards of Care Committee, and agreed by the Executive Committee of the British Thoracic Society, at their meeting on 13 January 1993. The need for such guidelines was suggested by colleagues in Edinburgh and London.

Oxygen saturation monitoring and supplemental oxygen therapy

Most patients requiring bronchoscopy have lung disease or abnormal lung function and several of the procedures performed during bronchoscopy cause a lowering of arterial oxygenation. For these reasons it is recommended that patients undergoing bronchoscopy are monitored by pulse oximetry during the procedure. This not only allows arterial oxygen saturation to be monitored but also allows detection of dangerous tachycardias, bradycardias, or cardiac irregularities. Supplemental oxygen should be given to maintain the arterial oxygen saturation at or above 90%. Patients who become hypoxic and require oxygen during the procedure should continue to receive oxygen during the recovery period when the lowest oxygen saturation commonly occurs.

Resuscitation equipment

Standard cardiac and respiratory arrest resuscitation equipment should be available in the bronchoscopy suite including equipment for endotracheal intubation and defibrillation. Staff require training and regular updating in resuscitation skills.

Intravenous access

All patients given intravenous sedation should have continuous intravenous access through an indwelling line throughout the procedure.

Staff

In addition to the bronchoscopist and assisting nurse we recommend there should be at least one other nurse present during the procedure, or a second doctor either present or readily available. Bronchoscopy nurses should be specifically trained in the handling of fiberoptic instruments.

Infection control and sterilisation of the bronchoscope

All bronchoscopists are advised to wear gloves, gown, mask, and close fitting eye protection for all patients. Mucocutaneous transmission of HIV has occurred from splashing of blood and secretions. It is not possible to identify infectious patients, and the only sensible policy is a universal one (Recommendations of the BTS Working Party on Infection Control Policy, BTS Newsletter No.3, Winter 1988 and later published in the *Lancet* 1989;ii:270-1). We would recommend that copies of this policy are available in all areas where fiberoptic bronchoscopy is undertaken.

Drugs

If patients receive drugs with potential respiratory depressive effects antidotes should be immediately available.

ECG

ECG monitoring is not necessary in every patient but would be indicated in patients with known cardiac problems including dysrhythmias.

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NOTICES

British Sleep Society

The annual scientific meeting of the British Sleep Society will be held at Trinity College, Dublin, Ireland on 12-14 September 1993. For registration and abstract forms contact Dr C Idzikowski, tel (+44) 0226 380287, fax (+44)0846 603181. For additional/local information contact Dr W McNicholas, tel. (+353)1 2695033, fax (+353)1 2697949.

World Association of Sarcoidosis and Other Granulomatous Disorders

The next international conference on sarcoidosis will be held on 8-11 September 1993 in Los Angeles. It will include state of the art lectures, breakfast seminars, six clinicopathological conferences, consensus conferences, and poster exhibits. The Conference headquarters will be the Ritz-Carlton Huntington Hotel, Pasadena. For further details, write to Om Sharma MD, Suite 177, 626N Garfield, Alhambra, California 91802, USA.