41. **Cote CG**, Celli BR. Pulmonary rehabilitation and the BODE index in COPD. *Eur Respir J* 2005;**26**:630–6.
42. Expert panel on detection, evaluation, and treatment of high blood cholesterol in adults. *JAMA* 2001;**285**:2486–97.
43. **Garcia-Aymerich J**, Lange P, Benet M, *et al*. Regular physical activity reduces hospital admission and mortality in chronic obstructive pulmonary disease: a population based cohort study. *Thorax* 2006;**61**:772–8.
44. **Martinez FJ**, Foster G, Curtis JL, *et al*, for the NETT Research Group. Predictors of mortality in patients with emphysema and severe airflow obstruction. *Am J Respir Crit Care Med* 2006;**173**:1326–34.
45. **Troosters T**, Casaburi R, Gosselink R, *et al*. Pulmonary rehabilitation in chronic obstructive pulmonary disease. *Am J Respir Crit Care Med* 2005;**172**:19–38.
46. **World Health Organization**. *The world health report 2002: reducing risk, promoting healthy life*. Geneva: World Health Organization, 2002.
47. **Wang TJ**, Evans JC, Benjamin EJ, *et al*. Natural history of asymptomatic left ventricular systolic dysfunction in the community. *Circulation* 2003;**108**:977–82.
48. **European Society of Cardiology (Working Group Report)**. Recommendations for exercise training in chronic heart failure patients. *Eur Heart J* 2001;**22**:125–35.
49. **Lenzen M**, Scholte op Reimer W, Norekval TM, *et al*. Pharmacological treatment and perceived health status during 1-year follow up in patients diagnosed with coronary artery disease, but ineligible for revascularization. Results from the Euro Heart Survey on Coronary Revascularization. *Eur J Cardiovasc Nurs* 2006;**5**:115–21.
50. **Tinetti ME**, Bogardus ST, Agostini JV. Potential pitfalls of disease-specific guidelines for patients with multiple conditions. *N Engl J Med* 2004;**351**:2870–4.

Pulmonary puzzle

Progressive dyspnoea, pleural effusions and lytic bone lesions

CLINICAL PRESENTATION

A 72-year-old man was referred following a CT scan which showed lytic and sclerotic lesions in the spine and pelvis with bilateral pleural effusions and thickening. The patient was an ex-smoker with progressive dyspnoea and significant weight loss over 1 year. There was no history of exposure to asbestos. Pleural fluid analysis revealed a transudate with no malignant cells. A repeat CT scan showed small bilateral pleural effusions and rinds of solid tissue within the pleural space extending to surround the descending thoracic aorta and aortic arch. Nodular reticular shadowing was seen in both lungs extending to the periphery, particularly in the upper lobes. Another soft tissue rind surrounded the kidneys with renal sinus fat obliteration. Presumed metastases were seen in both iliac bones with surrounding sclerosis on the left and the T7 vertebral body. An isotope bone scan revealed extensive focal increased tracer activity in lower limb long bones (fig 1). Initial pleural biopsy, performed to investigate the diagnosis of malignancy, showed non-specific fibrosis. Before further investigations could be undertaken, the patient died from aspiration pneumonia following a stroke. Because of the suspicion of mesothelioma, a coronal autopsy was undertaken which confirmed bilateral pleural thickening up to 1 cm with focal calcification but no macroscopic parenchymal infiltration.

QUESTION

What is the diagnosis?

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RT ANTERIOR LT

LT POSTERIOR RT

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