79. **Piper AJ**, Wang WD, Yee BJ, *et al*. Randomised trial of CPAP vs bilevel support in the treatment of obesity hypoventilation syndrome without severe nocturnal desaturation. *Thorax* 2008;**63**:395–401.
80. **Storre JH**, Seuthe B, Fiechter R, *et al*. Average volume-assured pressure support in obesity hypoventilation: a randomized crossover trial. *Chest* 2006;**130**:815–21.
81. **Mokhlesi B**. Positive airway pressure titration in obesity hypoventilation syndrome: continuous positive airway pressure or bilevel positive airway pressure. *Chest* 2007;**131**:1624–6.
82. **Fanfulla F**, Taurino AE, Lupo ND, *et al*. Effect of sleep on patient/ventilator asynchrony in patients undergoing chronic non-invasive mechanical ventilation. *Respir Med* 2007;**101**:1702–7.
83. **Guo YF**, Sforza E, Janssens JP. Respiratory patterns during sleep in obesity-hypoventilation patients treated with nocturnal pressure support: a preliminary report. *Chest* 2007;**131**:1090–9.
84. **Laub M**, Midgren B. Survival of patients on home mechanical ventilation: a nationwide prospective study. *Respir Med* 2007;**101**:1074–8.

Pulmonary puzzle

Bilateral nodular pulmonary infiltrates in an immunocompromised host

CLINICAL PRESENTATION

A 74-year-old man of Jamaican origin residing in the USA for 20 years presented to the hospital with progressively increasing shortness of breath and low-grade fever for 3 weeks. He had been diagnosed with non-Hodgkin's lymphoma 6 months prior to admission and started on chemotherapy with cyclophosphamide, doxorubicin, vincristine and prednisolone, with the last dose 12 days before presentation. In the hospital he was found to be hypoxic (82% saturation on room air) and required intubation and mechanical ventilation in the next 24 h. The clinical examination was unremarkable. His white blood cell count was 1100/mm³ with a normal differential. A chest

Figure 1 CT scan of the chest showing bilateral nodular infiltrates.

Figure 2 Bronchoalveolar lavage fluid showing filariform larva.

radiograph and CT scan of the chest revealed diffuse bilateral nodular infiltrates (fig 1). He was started on antibiotics without improvement.

Bronchoscopy with bronchoalveolar lavage was performed on the second day. The airways were found to be inflamed and the lavage revealed abundant filariform larvae about 550 µm long with a notched tail (fig 2). His stool also showed similar larvae.

QUESTION

What is the diagnosis?

See page 753.

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