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Pulmonary puzzle

Perils of fire eating

CLINICAL PRESENTATION

A 17-year-old man, a non-smoker, presented with a 4-day history of chest pain and dyspnoea. The symptoms had begun immediately after an episode of aspiration, which occurred whilst learning to be a fire eater. The patient was on holiday abroad at the time of the incident and attended the emergency department 3 days after returning home because his symptoms had persisted. There was no previous medical history.

Clinical examination revealed chest wall tenderness and crackles were heard in the right base. Room air blood gas analysis showed an arterial oxygen tension of 10.7 kPa, white blood cell count $13.6 \times 10^9/l$, C-reactive protein 131 mg/l and erythrocyte sedimentation rate 37 mm/h. A chest radiograph

Figure 1 Chest radiograph showing an area of consolidation in the right middle lobe.

Figure 2 Axial CT image demonstrating air space consolidation of the right middle and lower lobes bilaterally.

demonstrated a rounded density in the right middle lobe (fig 1). Treatment with oral prednisolone, co-amoxiclav and nebulised salbutamol was commenced. A high-resolution CT scan of the thorax showed an area of consolidation in the right middle lobe and ground-glass attenuation in the right middle and bilateral lower lobes (fig 2).

QUESTION

What is the diagnosis?

See page 439.

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