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Pulmonary puzzle

ANSWER

From the question on page 401.

The incident occurred 4 days after accidental aspiration of isoparaffin which is used in fire eating. The normal procedure is to blow out the isoparaffin against a burning stick; however, in this case the patient inspired and aspirated the isoparaffin. This case describes an acute form of lipid pneumonia or fire eater's lung. There have been reports of chronic aspiration of liquid paraffin where it has been used to treat constipation, particularly in children.¹ Since liquid paraffin has a high viscosity, it depresses the cough reflex, facilitating aspiration.

The clinical presentation may vary from an incidental detection on the chest radiograph to acute pneumonia as in this case or chronic fibrosis. Inflammatory markers and white cell count are raised in the cases described. The chest radiograph typically shows alveolar consolidation and ground-glass opacities.² A CT scan of the thorax may demonstrate areas of alveolitis, consolidation and pneumatoceles.³ Bronchoscopy and bronchoalveolar lavage may be useful where the diagnosis is in doubt. Fat globules are found in the bronchoalveolar fluid and lipid-laden macrophages are noted on cytological examination. Pulmonary function testing may demonstrate bronchial hyperresponsiveness and a restrictive ventilatory defect.⁴

Case reports have described treatment with corticosteroids, although there are no experimental data supporting their role.⁵ Prophylactic antibiotics are also reported to be used in the treatment and may treat any co-existing bacterial infection. The prognosis is generally good, but one study found that 21% of patients developed complications which included fibrosis, abscesses, effusions, bronchopulmonary fistula and bacterial superinfection.³

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