

LETTERS TO THE EDITOR

Slow Resolving Pneumonia in a 70-Year-Old Male Smoker

To the Editor: Lipoid pneumonia is a rare disorder and difficult to diagnose. It should be suspected in cases of slow resolving pneumonia particularly if accompanied by pulmonary mass-like lesions visible on radiographs. Although acute^{1,2} and work-related³ forms have been described, the most common form is chronic lipid pneumonia due to the aspiration of small amounts of oily material over a long period. A lung sample is essential for demonstrating the presence of lipid-laden macrophages. This sample is usually obtained from bronchoalveolar lavage, but transbronchial or open pulmonary biopsy may also be performed. We report the case of a patient with repeated aspirations of mineral oil, diagnosed by transthoracic needle aspiration.

The patient was a 70-year-old male smoker of 30 pack-years, who had had systemic arterial hypertension since his youth and who had suffered a cerebrovascular accident that left sequelae of dysarthria, left hemiplegia, and swallowing disorder with related microaspiration and pneumonia. He was admitted to hospital with fever and pulmonary infiltrates in both lungs. After a diagnosis of aspiration pneumonia, the patient was treated with clindamycin and a third-generation cephalosporin, with good clinical response but no radiographic improvement. The figure shows the computed tomography scan (CT) performed while the patient was in hospital. Fiberoptic bronchoscopy revealed no significant findings. Follow-up chest x-rays taken after a month showed slight improvement, although the mass-like image remained. Suspicion of lung cancer led to CT-guided transthoracic fine needle aspiration. Transparent oily material was obtained, and sputum cytology revealed the presence of lipid-laden macrophages. After further questioning, the patient mentioned ongoing consumption of mineral oil as a laxative. At that point, exogenous lipid pneumonia was diagnosed, and laxative administration was discontinued. However, follow-up radiographs revealed little change.

The most common cause of exogenous lipid pneumonia is the chronic aspiration of mineral

oil used as a laxative, followed by inhalation of oily nose drops. The oil reaches the alveoli and causes an inflammatory reaction.⁴ Mineral oil is relatively inert, causes no cough reflex and alters mucociliary clearance, thereby facilitating its arrival to distal air spaces. After emulsion, it is phagocytized by macrophages. If repeated aspiration occurs, it behaves like a foreign body and gives rise to a fibrotic reaction, whereby large lipid drops are enveloped in fibrous tissue and giant cells, causing a pseudo tumor called a paraffinoma. High-resolution CT shows a mottled pattern of alveolar consolidation, ground-glass opacities, interstitial changes, and nodular lesions or low-density masses.⁵ The diagnosis of exogenous lipid pneumonia is based on a history of exposure, a chest radiograph and/or CT scan consistent with the diagnosis, and the presence of lipid-laden macrophages in sputum or bronchoalveolar lavage. If the findings are not conclusive, a transbronchial or lung biopsy is recommended. However, in our case, needle aspiration of the pseudomass in the lung enabled us to obtain oily material, and we consider this to be a suitable way to arrive at a diagnosis, given that these patients may present in a deteriorated state and may not be good candidates for more aggressive diagnostic procedures. To date, we have found no case diagnosed by this method, though we believe it can be an equally effective and sometimes less dangerous approach. Treatment consists of avoiding exposure and treating infectious complications. The use of systemic corticosteroids or therapeutic bronchoalveolar lavage has been proposed, although the usefulness of these options has not been fully established.⁶

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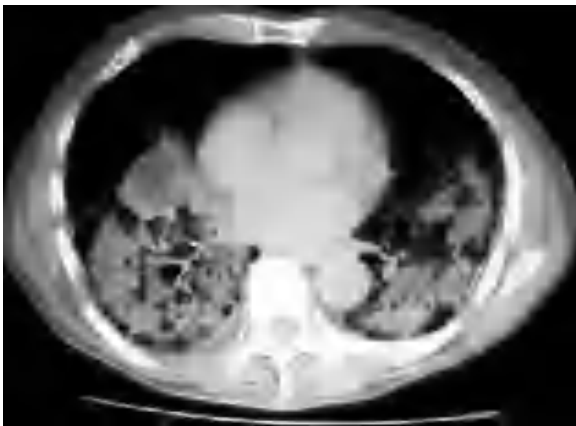


Figure. Computed tomography scan of the thorax following 2 weeks of treatment with antibiotics. A pattern of alveolar consolidation is observed, along with an image of heterogeneous lung mass and low density opacities.