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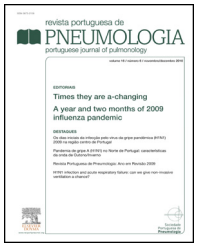

CASE REPORT

Exogenous lipoid pneumonia caused by chronic improper use of baby body oil in adult patient

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KEYWORDS
Aspiration;
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Abstract
Introduction: Exogenous lipoid pneumonia (ELP) is an uncommon condition resulting from aspirating or inhaling fatlike material. These substances elicit a foreign body reaction and proliferative fibrosis in the lung.
Case report: We report a case of a 38-year-old woman with bilateral pulmonary infiltration. There were no clinical symptoms of this infiltration at diagnosis. The infiltration was found coincidentally during the pre-operation examination before surgery. A chest computed tomography scan revealed bilateral lung consolidation, particularly in the S6 area on the right side. The transthoracic lung biopsy led to suspicion of ELP. Precise anamnesis confirms the diagnosis of ELP caused by chronic improper use of baby body oil. Two years after discontinuing ''baby body oil therapy'', a chest CT scan revealed partial regression of pulmonary infiltration.
Conclusion: The diagnosis of exogenous lipoid pneumonia is often difficult as symptoms, signs, and radiographic findings are all rather non-specific. We would like to emphasize the role of precise case history in better identification of ELP.

PALAVRAS-CHAVE
Aspiração;
Pneumonia lipoide exógena;
Óleo corporal para bebés

Pneumonia lipoide exógena provocada pela utilização crónica indevida de óleo corporal para bebés num paciente adulto

Resumo
Introdução: A pneumonia lipoide exógena (ELP) é uma condição incomum resultante da aspiração ou inalação de material gorduroso. Estas substâncias provocam uma reação a corpo estranho que pode resultar em fibrose pulmonar proliferativa.
Caso clínico: Neste trabalho relatamos o caso de uma doente de 38 anos com infiltrado pulmonar bilateral. Não houve sintomas resultantes desta infiltração infiltração no momento

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do diagnóstico. Esta alteração imagiológica foi encontrada, por acaso, durante o exame pré-operatório. A tomografia computadorizada do tórax revelou consolidação pulmonar bilateral, particularmente na área S6 do lado direito. A biópsia transtorácica pulmonar conduziu a uma suspeita de ELP. Uma análise precisa do histórico da paciente confirmou o diagnóstico de ELP provocada por uma utilização continuada e desapropriada de óleo corporal para bebés. Dois anos após a descontinuação da exposição ao óleo corporal para bebés, uma tomografia computorizada de tórax revelou uma regressão parcial do infiltrado pulmonar.

Conclusões: O diagnóstico de pneumonia lipoide exógena é muitas vezes difícil, já que os sintomas, sinais e imagens radiológicas são bastante inespecíficos. Gostaríamos de destacar a importância da análise precisa do histórico dos pacientes para uma melhor identificação de ELP.

Introduction

Lipoid pneumonia can be classified as endogenous, idiopathic, or exogenous.[1] Endogenous lipoid pneumonia is the least frequent and is generally observed in patients with chronic bronchial obstruction of the airways by tumors, bronchiolitis obliterans, and lipid storage diseases such as Gaucher's disease and Niemann–Pick disease. Idiopathic lipoid pneumonia is a rare disorder and has been associated with smoking in healthy individuals. Exogenous lipoid pneumonia (ELP) is an uncommon condition resulting from aspirating or inhaling fat-like material.[1,2] These substances elicit a foreign body reaction and proliferative fibrosis in the lung. Symptoms can vary significantly among individuals, ranging from asymptomatic to severe, life-threatening disease. The radiological findings have variable patterns and distribution. For this reason, lipoid pneumonia may mimic many other diseases.[1] The diagnosis of ELP is based on a history of exposure to oil, characteristic radiological findings, and the presence of lipid-laden macrophages in sputum or BAL analysis. There are currently no studies in literature that define the best therapeutic option; however, there is a consensus that the key measure is identifying and discontinuing exposure to the offending agent.[1,2]

Case report

A 38-year-old woman was referred to our department for bilateral pulmonary infiltration. The infiltration was found coincidentally during the pre-operation examination before leg varices surgery. Nothing was bothering the patient. She was a non-smoker and did not take any regular medication. The pulmonary function test proved a mild impairment of diffusing capacity (61% diffusing capacity for carbon monoxide – DL_{CO}). Nevertheless, her chest X-ray disclosed extensive infiltration in both lungs (Fig. 1A). A chest computed tomography (CT) scan revealed bilateral lung consolidation, particularly in the S6 area on the right side (Fig. 2A). In differential diagnosis according to findings of high-resolution CT (HRCT) of thorax, we considered pulmonary alveolar proteinosis, alveolar hemorrhage, or bronchioloalveolar carcinoma. However, the clear right predominance of lesions gave primary support to the aspiration etiology of lesions. Laboratory blood findings (hematology, biochemistry, antibody, tumor markers) were normal. By auscultation, we found sporadic crackles over the right lung. The bronchoalveolar fluid had a greasy appearance. Lymphocytic alveolitis was also found (lymphocytes 21%). The transthoracic lung biopsy revealed vacuolated macrophages,

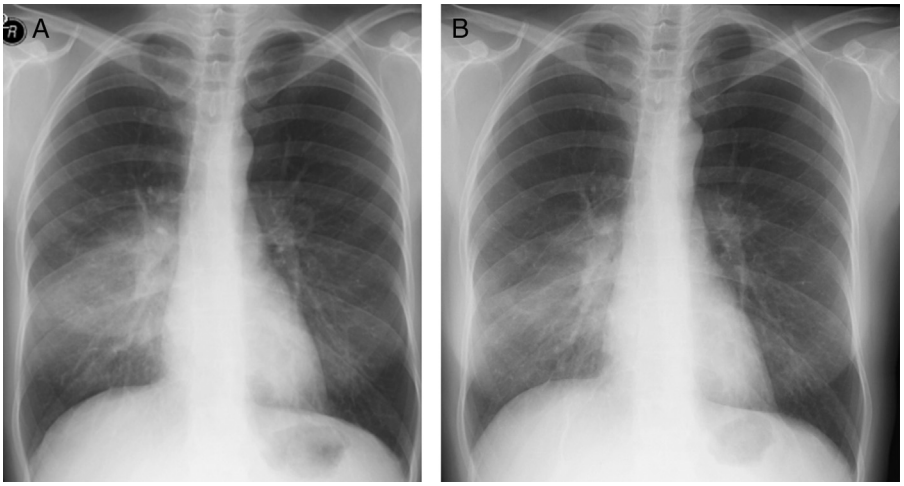

Figure 1 Chest X-rays at diagnosis (A) and six months after diagnosis (B). Extensive and intense infiltration with maximum intensity on the right side, in the area of segment S6 at diagnosis, and partial regression of pulmonary infiltration six months later.