Alveolar Silicoproteinosis - A Rare Type of Silicosis

Liliana Torres, Diana Pereira Anjos
Centro Hospitalar do Tâmega e Sousa, Portugal
Palabras clave: Silice. Silicoproteinosis. Tomografía de Alta Resolución
Keywords: Silica. Silicoproteinosis. High-Resolution Tomography

Alveolar silicoproteinosis is an uncommon form of silicosis that develops within weeks to a few years after exposure to high concentrations of respirable crystalline silica particles. It is associated to a rapid deterioration of pulmonary function due to intra-alveolar accumulation of lipoproteinaceous material that causes bilateral consolidation, multifocal patchy ground-glass opacities and a crazy-paving appearance. Without an effective response to treatment, its prognosis is poor with a life expectancy of 4 years after diagnosis.

A 45-year-old male presented with exertional dyspnea and dry cough for the past 3 months. He worked as a granite mason and was a former smoker (40 pack-year cigarette smoking history). When examined, he was tachypneic with pulse oximetry saturation of 88% (room air) and had scattered fine crackles throughout his lungs. High-resolution tomography scans showed diffuse small nodules and a crazy-paving pattern (Figure 1). Cytological analysis of bronchoalveolar lavage revealed finely granular eosinophilic PAS-positive material. He underwent sequential therapeutic whole-lung lavage with resolution of his clinical condition. He was discharged 20 days after admission and was advised to change his job. The patient remains asymptomatic ever since.

The authors present a case of alveolar silicoproteinosis with an atypical benign course and wish to raise awareness to the risks from silica exposure.

References

Figure 1. High-resolution tomography scans: diffuse small nodules with a crazy-paving pattern