

## ARCHIVOS DE BRONCONEUMOLOGIA





## Clinical Image Progressive Massive Fibrosis in a Former Cleaner Due to Sandblasting<sup>A</sup> Fibrosis masiva progresiva en un extrabajador de limpieza mediante chorro de arena Antonio Bueno Palomino

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We present the case of a 60-year-old man with a history of active smoking (40 packs/year), COPD, right upper lobe pneumonia and tubercular esophagocutaneous fistula. He worked as a sandblaster for 25 years and generally failed to use protection in the workplace. Over the previous months, he had suffered progressive dyspnea with no cough, fever, expectoration or associated constitutional symptoms.

On auscultation, several disseminated rhonchi were found in both lung fields. No significant findings were revealed on general



**Fig. 1.** Posteroanterior (A) and lateral (B) chest X-ray: bilateral posterior upper lobe opacities (visible in B), associated with volume loss, hilar retraction and compensatory emphysema of the lower lobes. Diffuse bilateral nodular pattern. Hilar adenopathies with peripheral "egg-shell" calcifications. Coronal (C, E) and axial (D, F) CT images in lung and mediastinal window, respectively: bilateral opacities in posterior upper lobe segments containing punctiform calcifications. Paracicatricial emphysema between right upper lobe opacity and adjacent pleura (asterisk). Multiple diffuse bilateral centrilobular nodules. Mediastinal and hilar adenopathies with "egg-shell" calcifications (arrows).

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laboratory testing and venous blood gases were as follows: pH: 7.45; PCO<sub>2</sub>: 35; PO<sub>2</sub>: 92; SaO<sub>2</sub>: 97%. Lung function testing showed a mixed pattern with forced vital capacity (FVC) 2.67 L (72%), forced expiratory volume in 1 s (FEV<sub>1</sub>) 1.67 L (57%), FEV<sub>1</sub>/FVC: 62% and forced expiratory flow between 25% and 75% of vital capacity (FEF: 25–75) 51%.

Chest X-ray revealed a diffuse bilateral nodular pattern with posterior opacities in the upper lobes associated with volume loss, hilar retraction and compensatory emphysema of the lower lobes, in addition to bilateral hilar adenopathies with peripheral "egg-shell" calcifications (Fig. 1A, B, E, and F).

CT revealed opacities containing punctiform calcifications, along with paracicatricial emphysema between the right upper lobe opacity and the adjacent pleura (Fig. 1C and D). These findings were consistent with progressive massive fibrosis. The patient was advised to quit smoking and symptomatic treatment with bronchodilators and N-acetylcysteine was started. The patient's respiratory situation is currently stable.

## **Recommended bibliography**

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