

Pleural Plaques and Bronchogenic Adenocarcinoma in the Setting of Asbestos Exposure

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75 years-old Mexican man with chronic obstructive pulmonary disease (COPD), smoker of 68 pack year and occupational asbestos exposure for more than 20 years, presented with persistent singultus and 25 lbs weight loss for the past 3 months. Physical exam revealed a cachectic man with decrease excursion on the right side and dullness to percussion.

Previous chest X-rays (CXR), done 3 years prior, showed bilateral calcified pleural plaques (Panel A, arrows). A CXR performed on admission demonstrated a large right middle lobe mass (Panel B) without mass effect or obstruction. Computer tomography of the chest revealed a large pleural based mass (15 x 14 x 8 cm) in the right middle lobe (Panel C and D). Bronchial biopsies, obtained by bronchoscopy, demonstrated a poorly differentiated bronchogenic adenocarcinoma. No asbestos bodies were identified in the bronchoalveolar lavage sample, the bronchial brushing or the biopsy itself. The patient decided to receive palliative treatment.

Asbestos bodies are only present in 33% of samples of patients with asbestosis¹. There is an association between the development of lung cancer and asbestos exposure (relative risk 3.5) that is exponentially magnified by smoking, the risk increase of developing cancer is greater in smokers (16 folds) versus non-smokers (6 folds)². Asbestosis is associated with the development of bronchogenic carcinoma and malignant mesothelioma. Poorly differentiated adenocarcinomas have a median survival of five months³.

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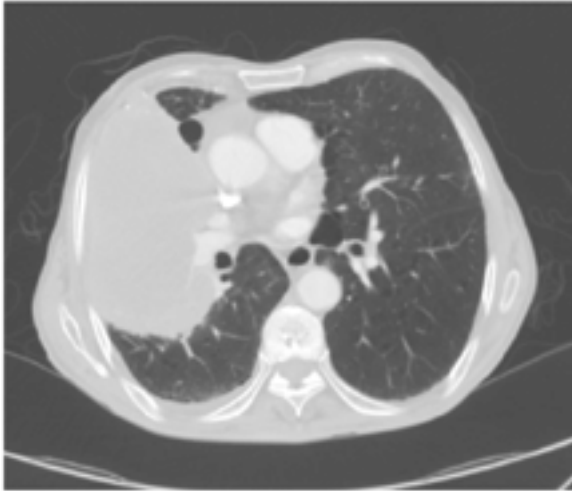
Panel A



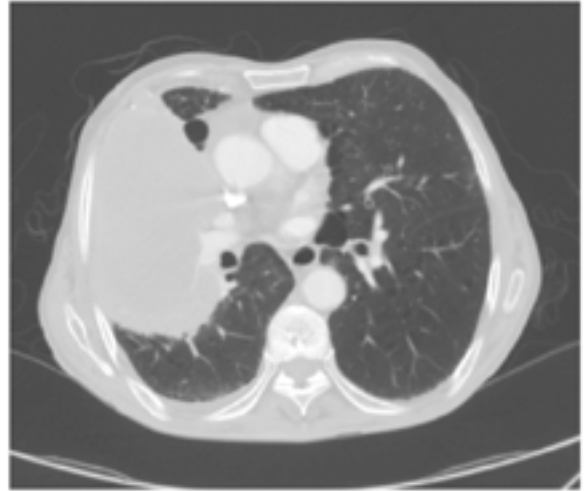
Panel B

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(Continued)



Panel C



Panel D

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