

Micronodular Pattern Caused by Bronchioloalveolar Carcinoma

Patrón micronodular causado por carcinoma bronquioloalveolar

To the Editor:

We have read with great interest the case presented by Mejía-Lozano et al¹ of a 71-year-old woman, with no history of smoking, who presented progressive dyspnea, cough, chest pain and a micronodular radiographic pattern. The anatomopathologic diagnosis of adenocarcinoma was confirmed by means of pulmonary biopsy. The authors affirm that, although they have been previously reported in other articles, micronodular image patterns are rarely associated with lung carcinoma, and they are frequently difficult to interpret. As no biopsy was taken, we lack definitive proof that this patient indeed had disseminated lung adenocarcinoma (the opinion held by the authors) and not lung metastasis of a distant tumor.

Although they do not present high-resolution computed tomography (CT) images, the authors describe the observation of consolidations in the air space associated with micronodules. These observations made us suspect bronchioloalveolar carcinoma, given the association of the diffuse forms of presentation of these pulmonary neoplasms with similar patterns on CT. In contrast, non-bronchioloalveolar carcinomas are usually observed in localized forms. As the authors state, metastatic adenocarcinoma can have similar patterns that can be difficult to differentiate from those of a primary tumor, even by experienced anatomopathologists.²

Bronchioloalveolar carcinoma can be defined as a well-differentiated peripheral neoplasm that tends to spread locally in the peripheral airspace, using the lung structure as stroma. The signs observed on high-resolution CT in diffuse bronchioloalveolar carcinoma can be classified into 3 groups, depending on the predominant characteristic: ground-glass opacities, consolidation and multiple nodules. Although the nodules are usually well-delimited, they can also be undefined. The disseminated multinodular form of this carcinoma is frequently indistinguishable from infections or metastatic disease.²⁻⁴

We would like to present the case of a patient with a bronchioloalveolar carcinoma that presented with diffuse micronodular pattern. The patient, a 59-year-old male, came to our service with symptoms that had been evolving over the previous three months of persistent dry cough, progressive dyspnea, fatigue and a weight loss of 8 kg during that period of time. He had no history of smoking, alcohol abuse, or primary malignant diseases. The patient presented bilateral inspiratory rales in the lower lung fields. Hemogram, hepatic function tests and other laboratory analyses were normal. High resolution CT images showed the presence of converging nodules in both lungs (fig. 1). Bronchoscopy

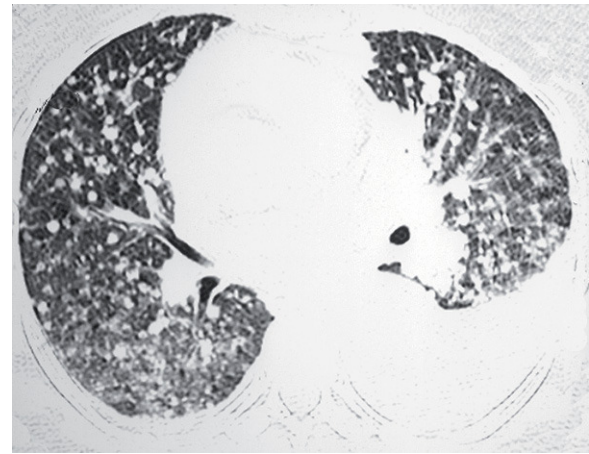


Figure 1. High-resolution CT image of the lower lung lobes, showing multiple small nodules that are poorly defined and are distributed randomly, as well as areas of ground glass attenuation in both lungs. Left pleural effusion can also be appreciated.

showed no anomalies. The microscopic exam, sputum cultures and bronchoalveolar lavage samples were negative for mycobacteria and fungi. Open lung biopsy showed a mucinous bronchioloalveolar carcinoma. The patient died due to respiratory insufficiency two months after hospitalization.

Therefore, bronchioloalveolar carcinoma should be kept in mind as a type of pulmonary adenocarcinoma that can be seen with a diffuse micronodular pattern on chest radiography or CT.

References

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