

from the guide, X-ray confirmed that it was correctly placed. A nearly complete reduction of the bronchial air leak was observed. After extubation, the patient remained in the Intensive Care Unit for 24 h and was sent home 48 h after the procedure had been completed.

References

1. Feller-Kopman D, Bechara R, Gardland R, Ernst A, Ashiku S. Use of a removable endobronchial valve for the treatment of bronchopleural fistula. *Chest*. 2006;130:273–5.
2. Keckler SJ, Spilde TL, St Peter SD, Tsao K, Ostlie DJ. Treatment of bronchopleural fistula with small intestinal mucosa and fibrin glue sealant. *Ann Thorac Surg*. 2007;84:1383–6.

3. Kramer M, Peled N, Shitrit D, Atar E, Saute M, Shlomi D, et al. Use of Amplatzer device for endobronchial closure of bronchopleural fistulas. *Chest*. 2008;133:1481–4.

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Lung Cysts as Radiological Manifestations of Benign and Malignant Diseases: Pitfalls in the Diagnosis[☆]

Quistes pulmonares como manifestación radiológica de enfermedades benignas y malignas: errores en el diagnóstico

Dear Editor:

We have read with great interest the recently published article by Dr. Singh and Dr. Bal¹ about lung cancer in heavy smokers that presents as symptomatic solitary lung cysts. Their article shed new light on lung cysts as a common radiological manifestation of squamous carcinoma of the lung on computed tomography (CT).

Earlier studies had suggested that lung cyst lesions could be an initial radiological sign of bronchogenic carcinoma on thoracic CT. According to Lan *et al.*,² their patient was a 27-year-old woman who did not smoke, while the Singh and Bal patient was a 45-year-old male who was a heavy smoker. Both cases describe lung cancer that presents as solitary cystic lesions in the lower lung lobes. In contrast, the histologic pattern of the lung cancer was an adenocarcinoma in the case of Lan *et al.*, while it was only a squamous carcinoma in the present case. More recently, we have identified disseminated thin-walled cystic lesions as a new radiographic sign of pulmonary adenocarcinoma.³ In our case, we have reported a 39-year-old male who was a non-smoker with the growth of a centrally located mass in the upper left lobe and rapidly progressive diffuse cystic lesions in both lungs. We also observed hilar and mediastinal lymphadenopathies as well as an elevation in the tumor markers in circulating blood (CEA and CA-125). We performed a transbronchoscopic lung biopsy together with histologic tests and immunohistochemistry. These data have finally established the diagnosis of pulmonary adenocarcinoma.

What make these cases interesting are not only their uncommon forms of presentation but also their diagnostic difficulties. Cystic lung lesions, they being either solitary or diffuse, are mainly observed in benign disorders. However, other authors and we have demonstrated the presence of cystic lung lesions as being signs of malignant thoracic diseases.^{1–5} The diagnostic challenge arises from the prevalence of cystic lung lesions in several thoracic disorders (Table 1). Thus, although it is not frequent, the presence of

Table 1

Causes of Cystic Lung Lesions.

<i>Congenital</i>	<i>Immunological</i>
Cystic adenomatoid malformation	Wegener's granulomatosis
Lung cyst	Lymphocytic interstitial pneumonia
Birt–Hogg–Dubé syndrome	Follicular bronchiolitis
	Autoimmune disease
<i>Infectious</i>	<i>Neoplasms</i>
Pneumonia due to <i>Staphylococcus aureus</i>	Squamous carcinoma
Melioidosis	Adenocarcinoma
Histoplasmosis	Metastatic cancer
Cystic bronchiectasis	
<i>Various</i>	<i>Idiopathic</i>
Centrilobular emphysema	Pulmonary histiocytosis X
Lymphangiomyomatosis	Amyloidosis
	Light chain deposition disease

cystic lung lesions can also be associated with malignant diseases. The access to lung biopsy can be key in the precise diagnosis of these patients.

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References

1. Singh N, Bal A. Lung cyst caused by centrally located bronchogenic carcinoma. *Arch Bronconeumol*. 2011. doi:10.1016/j.arbres.2011.06.019.
2. Lan CC, Wu HC, Lee CH, Huang SF, Wu YK. Lung cancer with unusual presentation as a thin-walled cyst in a young nonsmoker. *J Thorac Oncol*. 2010;5:1481–2.
3. Zhang J, Zhao YL, Ye MX, Sun G, Wu H, Wu CG, et al. Rapidly progressive diffused cystic lesions as a radiological hallmark of lung adenocarcinoma. *J Thorac Oncol*. 2012;7:457–8.
4. Aderson HJ, Pierce JW. Carcinoma of the bronchus presenting as thin-walled cysts. *Thorax*. 1954;9:100–5.
5. Seaman DM, Meyer CA, Gilman MD, McCormack FX. Diffuse cystic lung disease at high-resolution CT. *AJR Am J Roentgenol*. 2011;196:1305–11.

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