intralobular septal thickening and nodular infiltration in the upper left lobe in addition to pleural thickening, with centrilobular emphysema (Fig. 1). The echocardiogram detected aortic endocarditis with severe aortic regurgitation, mild to moderate pulmonary hypertension secondary to elevated end-diastolic pressure in the left ventricle and an ejection fraction of 50%. The patient underwent a procedure, and radiographic images showed improvement at time of discharge.

Our searches of medical literature turned up only one case of unilateral pulmonary oedema in a patient with acute heart failure due to mitral regurgitation.[3] At present, CT is helpful in diagnosing heart conditions, including bacterial endocarditis.[4] However, this was not the case for our patient, whose radiology images were incompatible with acute pulmonary oedema.[4] Other peculiarities of this case were the absence of a prior predisposing heart condition and the age and sex, all of which are uncommon in native valve IE. The echocardiography findings plus the appearance of the heart murmur (two of the main Duke-Durack Criteria [Table 1]) enabled us to confirm the diagnosis of IE.[1,5]

As we see, a unilateral interstitial pattern in the radiology image does not exclude the possibility of pulmonary oedema of cardiac origin.

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Drainage of a Mediastinal Cyst by Endobronchial Ultrasound-Guided Needle Aspiration

Drenaje de quiste mediastínico mediante aspiración con aguja fina guiada por ecobroncoscopia

To the Editor:

Endobronchial ultrasound-guided transbronchial needle aspiration (EBUS-TBNA) has been shown to be highly useful in obtaining samples for lung cancer diagnosis and staging.[1] In addition, it is a diagnostic aid for benign illnesses such as tuberculosis and pulmonary sarcoidosis. We have recently learned that it also has therapeutic uses which include draining mediastinal cysts.[2,3] We will now present a case in which EBUS-TBNA was used to drain a mediastinal cyst.

A 65-year old male patient with 80 pack year smoking history was examined for left hemiparesis. The axial computed tomography (CAT) scan showed a right parietal space-occupying lesion indicative of cerebral metastasis. The chest radiography revealed a pulmonary mass with well-defined edges in the upper left lobe (ULL). The thoracic/abdominal CAT scan with intravenous contrast showed a pulmonary mass measuring 30×24mm in the ULL and left hilar adenopathies measuring 32×18mm. In addition, there was an image measuring 23×17mm which was morphologically similar to a right superior paratracheal adenopathy, but with a mean density of −7.9 Hounsfield units. The bronchoscopy did not reveal endobronchial lesions. The bronchial aspirate culture and ULL bronchoalveolar lavage were negative for malignancy. Fine-needle transthoracic aspiration of the mass in the ULL provided the cytological diagnosis of adenocarcinoma. EBUS-TBNA was performed on the upper right paratracheal lesion using convex probe endobronchial ultrasound (CP-EBUS) (model BF-UC160F; Olympus; Tokyo, Japan) and we observed an anechoic lesion measuring 1.48cm with no Doppler flow signal. By puncturing the mass we obtained 5cm^3 of yellowish liquid and observed that the lesion had shrunk in size (Fig. 1). The cytological study of the liquid showed a mixed smear with macrophage foam cells compatible with a bronchogenic cyst.

Mediastinal cysts are rare and generally asymptomatic, although they may cause compression and irritation to adjacent structures or become infected or malignant on the inside. In this case they require complete resection by thoracotomy or video-assisted thoracoscopy.[4-6] Recurrence is frequent when less invasive treatments are used, although when the cyst is collapsed by draining its entire content with EBUS-TBNA, lack of recurrence during up to 18 months has been observed.[2,3]

In a thoracic CAT scan, bronchogenic cysts appear as round, well-defined masses with low-density homogeneous attenuation similar

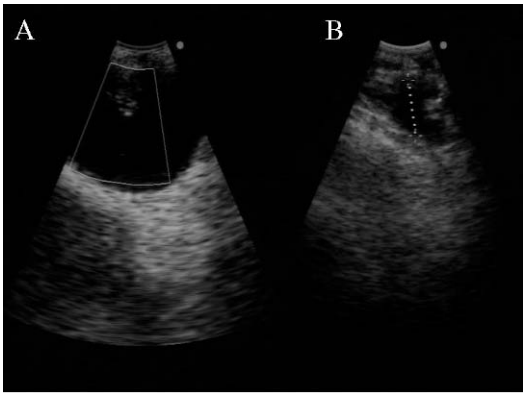

Figure 1. Ultrasound-guided bronchoscopy of the right paratracheal cyst: A) before puncture, in Doppler mode; and B) after draining.

.to that of water (0-20 Hounsfield units) or even lower, and therefore can be diagnosed reliably.[4,5] However, in 50% of all patients, cysts have a higher attenuation similar to that of a soft-tissue injury.[5] This increase in attenuation can be caused by an infection in the cyst or by high levels of proteins or calcium oxalate in the cyst's mucoid content.[5] When the CAT scan does not permit differential diagnosis, magnetic resonance imaging is useful for establishing the nature of the lesion's liquid content.[4] In our case, the high probability of neoplasia led us to think that the upper right paratracheal lesion could be an adenopathy, but it was found to be an incidental mediastinal cyst.

EBUS easily detects mediastinal cysts: it distinguishes them from vascular structures due to their lack of Doppler flow signal, and also enables cytological diagnosis and treatment by draining.

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Radiological Findings of Pulmonary Involvement of Type B Niemann-Pick Disease

Hallazgos radiológicos de afectación pulmonar por enfermedad de Niemann-Pick tipo B

To the Editor:

Niemann-Pick disease is a recessive, autosomal hereditary lysosomal storage disease. Deficient activity of acid sphingomyelinase causes build-up, mainly sphingomyelin, in central nervous system and reticuloendothelial system tissues. Depending on which organs are affected, there are various clinical subdivisions of Niemann-Pick disease. The most severe of the six disease subtypes is type A, which has an acute neuronopathic phenotype tending to cause death in early childhood. Type B is a heterogeneous disorder that presents in most patients without affecting the nervous system. Progressive pulmonary disease, hepatosplenomegaly, short stature and pancytopoenia may be present where involvement is systemic.

Our patient is a seven-year old girl. At nine months old, she was examined in the hospital due to abdominal distension. Hepatosplenomegaly was observed and the patient underwent a fine-needle aspiration biopsy of the liver. The diagnosis was Niemann-Pick type B. She presented dry cough and a fever. Physical exploration revealed hepatomegaly and splenomegaly. Cardiovascular and neurological examinations were normal. Pulmonary auscultation revealed pronounced crackling stertor in the lung bases. The kidney and liver function tests were normal. Laboratory findings revealed mild anaemia. After a clinical examination, the patient was referred to our centre for a chest radiography and high-resolution computed tomography (HRCT). Postero-anterior radiography revealed diffuse reticulonodular infiltration at the base of both lungs. The HRCT tests were performed without intravenous contrast. A multi-slice spiral computed tomography scan was performed using a 16-slice CT system (Somatom Sensation 16, Siemens, AG, Erlanger, Germany). Gantry rotation time was 0.5 sn. We used a tube with 100kVp voltage and a tube with 40mA (effective) current. The slice thickness was 1mm, with a slice interval of 9mm. An edge-detection filter was used. The chest HRCT detected areas with a ground-glass appearance in the left lung (in the anterior segment of the upper lobe and in the lingula). We observed peribronchovascular interstitial thickening and interlobular septal thickening in the lung bases. We also detected multiple pulmonary nodules in both lungs.

Niemann-Pick disease is a rare recessive and autosomal hereditary disease characterised by the accumulation of sphingomyelin due to a sphingomyelinase production deficiency. Excess sphingomyelin is deposited in the liver, the spleen, the lungs, the bone marrow or the brain.[1,2] The radiographic appearance of this condition is not specific, although we do observe linear streaks associated with nodular infiltrations, producing a honeycomb effect that extends diffusely to all areas of the lungs, particularly at the base.[1-3] The high-resolution tomography image showed thickening of the interlobular septa, without nodules, predominantly in the inferior area of the lungs. This was associated with more abundant ground-glass opacities in the superior and medial areas.[4] Although these regions are often separate from each other, they were intermixed at some locations. Intermixed regions are characterised by having a "crazy paving" appearance. Although this is not the most common profile, Niemann-Pick type B should be added to the list of diseases that can present this appearance.[5] Progressive pulmonary infiltration is an important cause of morbidity and mortality. To date, no successful treatments for lung damage caused by Niemann-Pick disease have been recorded. Complete pulmonary lavage seems to be a potentially useful treatment.[6]

In our case, we observed a ground-glass appearance, peribronchovascular interstitial and interlobular septal thickening, and pulmonary nodules in both lungs. All of these findings were determined with the HRCT technique, and are important for determining the existence of interstitial lung disease.

In conclusion, we must consider the possibility of a lung condition with lipid storage disorders, especially in children. The most reliable radiological technique to confirm it is HRCT (Fig. 1).

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