

## Letters to the Editor

**Primary Tracheal B-cell Lymphoma Causing  
Recurrent Central Airway Obstruction** ☆,☆☆

**Linfoma de células B traqueal primario causante de obstrucción  
recurrente de vías aéreas centrales**

To the Editor:

Primary malignant tumors of the trachea are very uncommon, and can often be confused with asthma or chronic obstructive pulmonary disease (COPD). Tracheal tumors are very rare, with an incidence of less than 0.01%; most are squamous cell carcinomas.<sup>1</sup> Very few cases of primary tracheal lymphoma causing central airway obstruction have been described to date.<sup>2</sup>

A 72-year-old man was admitted with difficulty breathing. The patient had been monitored for a year following a diagnosis of COPD. He had an 80 packs/year history of smoking. Physical examination and laboratory tests were normal. On bronchoscopy, a smooth polypoid mass was observed in the middle of the trachea, almost completely occupying the lumen. A diode laser and coring was used to debulk the tumor (Fig. 1a). Pathological examination revealed a B-cell lymphoma.

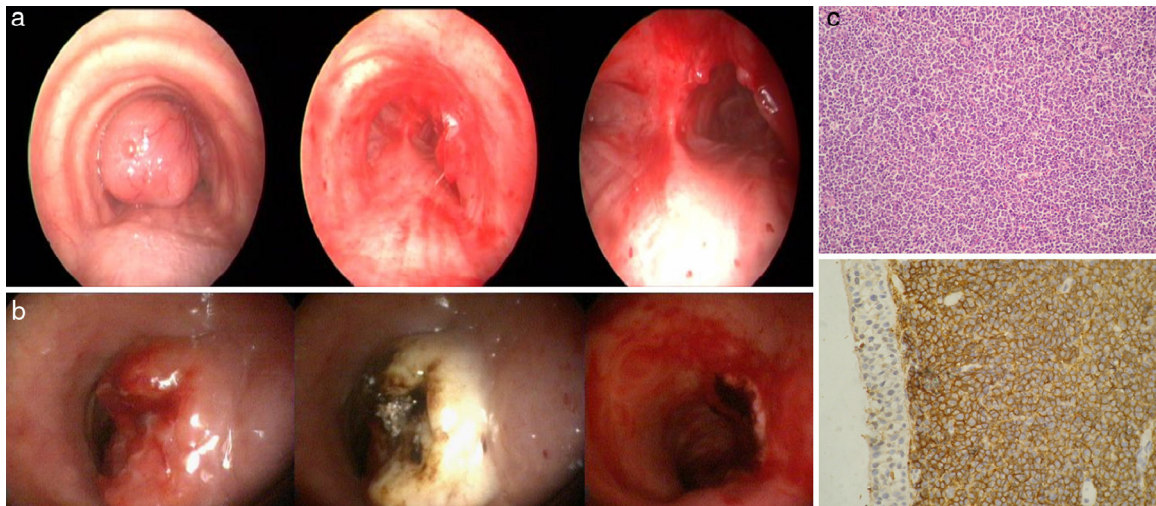
The patient received the appropriate chemotherapy, but 20 months after the first intervention he was readmitted to hospital

for stridor and dyspnea. The presence of another mass almost completely obstructing the upper third of the trachea was observed (Fig. 1b). Repeat interventional bronchoscopy was performed using a diode laser, and mechanical debulking was performed to completely clear the airway lumen.

Pathological examination revealed a round cell tumor. Immunohistochemical staining showed the presence of diffuse/strong CD20<sup>+</sup>, scant CD3<sup>+</sup> and CD5<sup>+</sup>, and disseminated CD45<sup>+</sup> (Fig. 1c). Macrocytic B-cell lymphoma was therefore diagnosed.

Around two thirds of all primary tracheal tumors are squamous cell carcinomas or adenoid cystic carcinomas. The remaining third are malignant, intermediate or benign lesions.<sup>1</sup> Primary hematopoietic malignant diseases of the trachea are very rare, and are observed more commonly in cases of extramedullary plasmocytoma or non-Hodgkin's lymphoma. Asthma and COPD are common erroneous diagnoses.<sup>3</sup> In fact our patient had been treated for COPD for one year prior to admission.

The treatment of choice depends on the size of the lesion, and it may be necessary to reconstruct the lumen of the tumor-free trachea. It should be remembered that non-Hodgkin's lymphoma is rarely limited to the trachea in a patient presenting central airway obstruction caused by an endoluminal mass. Airway obstruction can recur in another part of the trachea, despite using appropriate chemotherapy.



**Fig. 1.** (a and b) Bronchoscopy view before and after the interventions. (c) Immunohistochemical staining of a tracheal tumor showing large B-cell lymphoma.

☆ Please cite this article as: Önür ST, Dalar L, Sökücü SN. Linfoma de células B traqueal primario causante de obstrucción recurrente de vías aéreas centrales. Arch Bronconeumol. 2014;50:411–412.

☆☆ This manuscript was presented at the *European Respiratory Society Annual Congress* in Vienna 2012, as a poster presentation.

Complete emergency resection of a tumor in the trachea can be achieved with rigid bronchoscopy. In this case, the airway obstruction occurred on two occasions 20 months apart. The diagnosis was obtained using an interventional bronchoscopy approach with rapid improvement of the condition and opening of the airway lumen at the time of diagnosis.

### Conflicts of Interest

The authors declare that they have no conflicts of interest.

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### Diffuse Alveolar Hemorrhage as First Manifestation of a Pheochromocytoma<sup>☆</sup>



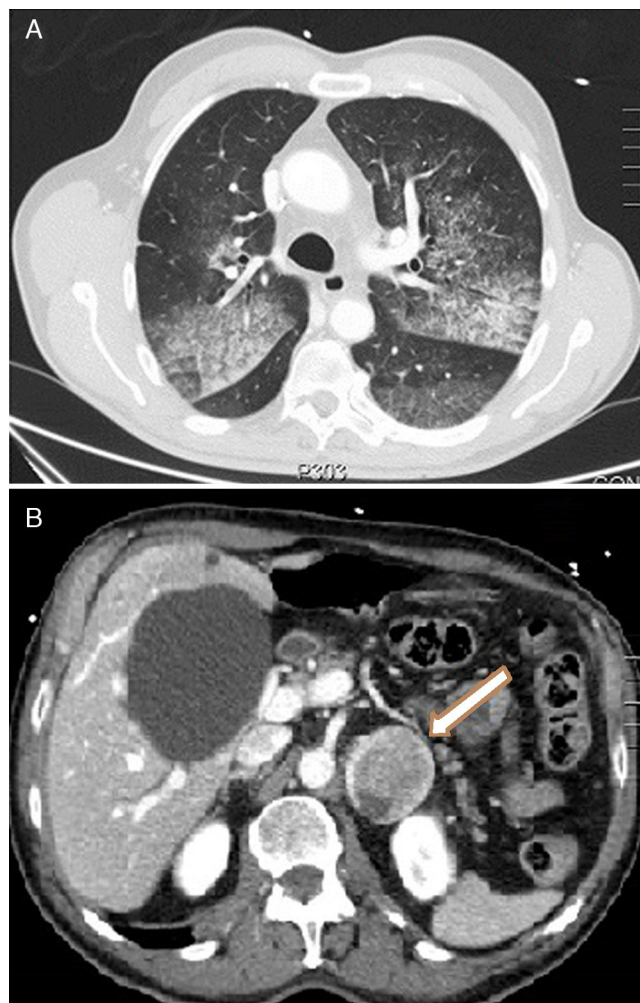
### Hemorragia alveolar difusa como primera manifestación clínica de un feocromocitoma

To the Editor:

Diffuse alveolar hemorrhage (DAH) is a clinical condition characterized by hemoptysis, anemia and dyspnea. The radiological pattern of this disease is defined by ground-glass consolidations and interlobular septal thickening (crazy-paving pattern). Causes are multiple and include malignancy, infections, autoimmune diseases, coagulopathies and pulmonary hypertension. Pheochromocytoma is a tumor derived from chromaffin cells that typically presents as arterial hypertension (HT) associated with diaphoresis, tachycardia and headache. We describe below the case of a patient whose initial clinical manifestation of pheochromocytoma was massive hemoptysis and acute coronary syndrome. This case demonstrates the importance of considering pheochromocytoma as a possible diagnosis in cases of DAH with no apparent cause.

A 68-year-old male was seen in the emergency room after an episode of frank hemoptysis associated with oppressive chest pain, nausea, sweating and pallor. Dyspnea, cold sweats and pallor were confirmed on physical examination. BP>180/100 mmHg, HR 120 bpm. There were no significant changes on ECG and bilateral diffuse alveolar pattern was observed on chest X-ray. Laboratory test parameters of note included blood glucose 257 mg/dl, leukocytosis with neutrophilia, hemoglobin 14 g/dl (MCV normal), creatinine 1.19 mg/dl, urea 62 mg/dl, troponin T 596.6 ng/l and CK 186 U/l. Arterial blood gases were compatible with hypoxemic respiratory failure (PaO<sub>2</sub> 51.4 mmHg). Non-ST segment elevation acute coronary syndrome with hemoptysis was suspected, so the patient was admitted to the ICU where double antiplatelet therapy was initiated but not anticoagulation, due to hemoptysis. The patient had another episode of frank hemoptysis associated with a hypertensive crisis requiring oxygen therapy and intravenous bolus administration of methylprednisolone. The clinical picture improved within hours with normalization of renal function and anemia (Hb 10.9 g/dl). When the patient was interviewed again, he reported episodes of headache, sweating and

palpitations on performing Valsalva manoeuvres. CT showed a crazy-paving lung pattern, ground-glass consolidations and interlobular septal thickening, compatible with alveolar hemorrhage (Fig. 1A) and heterogeneous left adrenal lesion 46 mm × 40 mm (Fig. 1B). Raised catecholamine and metanephrine levels in



**Fig. 1.** (A) CT axial image showing crazy-paving lung pattern: ground-glass consolidations and interlobular septal thickening. (B) CT axial image with contrast medium showing heterogeneous left adrenal lesion, 46 mm × 40 mm.

<sup>☆</sup> Please cite this article as: Querol Ripoll R, del Olmo García MI, Cámara Gómez R, Merino-Torres JF. Hemorragia alveolar difusa como primera manifestación clínica de un feocromocitoma. *Arch Bronconeumol.* 2014;50:412–413.