

CONTINUING MEDICAL EDUCATION ΣΥΝΕΧΙΖΟΜΕΝΗ ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

Thoracic Surgery Quiz – Case 9

A 60-year-old man was referred to our institution in October 2009 for evaluation after several episodes of recurrent pneumonia. He was, at the time, asymptomatic but had previously presented with cough, shortness of breath, intermittent wheezing and left-sided pleuritic chest pain and had been treated with antibiotics several times in the previous few months. His medical history was significant for hypertension and he had a 30-pack-year smoking history up until 8 months earlier when he quit smoking. His blood tests, including CBC, blood chemistry and tumor markers, were normal.

A chest X-ray carried out on the 23rd of June 2009 revealed a left lower lobar pneumonia (fig. 1). The radiographic findings were no longer evident by 9th of October 2009, the date upon which he was admitted to our clinic. A CT scan of the chest revealed a mass near the left lower bronchus, which appeared to be partially occluding the lumen (fig. 2). A bronchoscopy was deemed necessary in order to arrive at a diagnosis.

The bronchoscopy revealed a mass occluding the left lower bronchus. A biopsy was obtained and histological examination of biopsied material was compatible with a hamartoma.

Following these results, the course of action decided upon was surgery. A left lower lobectomy was performed via a left postero-lateral thoracotomy, after intraoperative frozen section



Figure 1



Figure 2

ARCHIVES OF HELLENIC MEDICINE 2009, 26(6):849–850
ΑΡΧΕΙΑ ΕΛΛΗΝΙΚΗΣ ΙΑΤΡΙΚΗΣ 2009, 26(6):849–850

C. Markakis,¹
E. Spartalis,²
P. Paraskeva,²
P. Katsaronis,²
K. Konstantoudakis,²
P. Tomos²

¹First Department of Surgery, "Tzaneio"
General Hospital of Pireus, Pireas

²Second Department of Propedeutic
Surgery, National and Kapodistrian
University of Athens, Medical School,
"Laiko" General Hospital of Athens,
Athens, Greece

could not definitively rule out malignancy. Histological evaluation of the resected specimen (fig. 3) revealed a benign mesenchymal neoplasm 1.5 cm in size, composed of lobules of fat, cartilage and mesenchymal tissue, whose composition was consistent with an endobronchial hamartoma. The patient's postoperative recovery was uneventful and he was discharged on the ninth postoperative day.

Comment

Lung hamartomas are the most common benign neoplasms of the lung. They are more frequent in men (2:1 ratio) and in individuals between 30 and 60 years of age. Although patients with

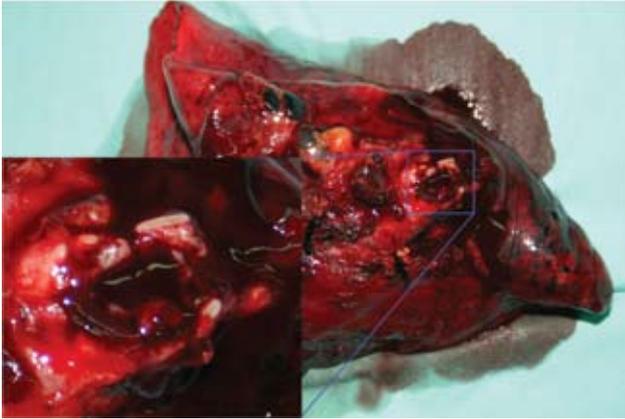


Figure 3

hamartomas present with symptoms in up to 40% in clinical series the majority of hamartomas are asymptomatic (their discovery is often due to symptoms caused by an unrelated pathology). No definitive relationship between the presence of a hamartoma and lung cancer has been shown to exist, although the two pathologies do sometimes co-exist.

Endobronchial hamartomas are rare, they account for 1.4–20% of the total incidence of hamartomas and this localization very frequently leads to symptoms such as coughing, wheezing, dyspnea, hemoptysis, obstructive pneumonia and recurrent infections (as in our patient), due to airway obstruction.

Their radiological appearance usually consists of an X-ray

suggestive of a benign mass, while the typical popcorn calcifications occur in 15–20% of patients. The tumor can be better visualized with a CT scan of the chest. However, in most cases it is advisable to carry out a bronchoscopy, seeing as the radiological study cannot rule out malignancy.

The management of endobronchial hamartomas is frequently surgical excision although successful endoscopic excision with or without laser therapy has been reported by specialized centers. The risks of bleeding, bronchial obstruction and recurrence notwithstanding, the overall prognosis is excellent for most patients.

References

1. COSÍO BG, VILLENA V, ECHAVE-SUSTAETA J, DE MIGUEL E, ALFARO J, HERNANDEZ L ET AL. Endobronchial hamartoma. *Chest* 2002, 122:202–205
2. WHYTE RI, DONINGTON JS. Hamartomas of the lung. *Semin Thorac Cardiovasc Surg* 2003, 15:301–304
3. GUO W, ZHAO YP, JIANG YG, WANG RW, MA Z. Surgical treatment and outcome of pulmonary hamartoma: A retrospective study of 20-year experience. *J Exp Clin Cancer Res* 2008, 27:8
4. GJEVRE JA, MYERS JL, PRAKASH UB. Pulmonary hamartomas. *Mayo Clin Proc* 1996, 71:14–20

Corresponding author:

C. Markakis, 1 Poseidonos street, GR-175 61 P. Faliro, Greece
e-mail: harismarkakis@hotmail.com