

## Chest Mass

Lynn Coppage, MD, FCCP, Angela Sroufe, MD, PhD,  
and Lary Robinson, MD, FCCP

From the Departments of Diagnostic Radiology (LC, AS) and Interdisciplinary Oncology (LR) at the H. Lee Moffitt Cancer Center & Research Institute, Tampa, Florida. E-mail: coppagl@moffitt.usf.edu

### Case Description

In 1999, a 49-year-old man fell, fracturing his wrist and ankle and requiring open reduction and internal fixation. He had a distant 7 pack-year smoking history. Routine pre-operative chest radiograph (Fig 1) and subsequent chest computed tomography (CT, Fig 2) demonstrated a 7-cm mass in the left mid thorax. Bronchoscopy was normal. The patient was asymptomatic, and his physician elected to follow the lesion. A chest CT scan 1 year later demon-



Fig 1. — Portable chest radiograph showing a large rounded mass projecting along the left cardiac border.

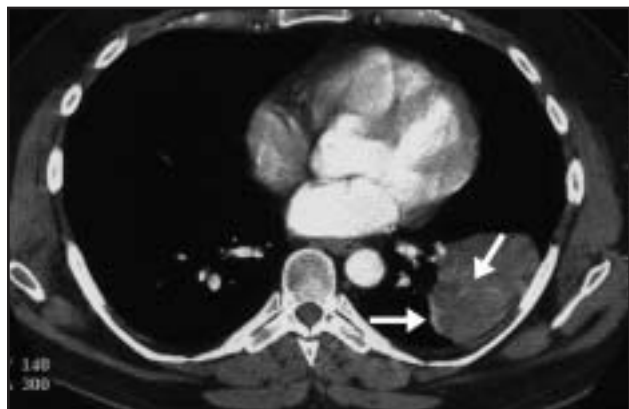


Fig 2. — Contrast enhanced axial CT image depicting a smoothly marginated peripheral mass in the left lower hemithorax. The mass is heterogeneous with focal areas of enhancement (arrows).

strated minimal increase in the size of the mass. Angiography showed a pulmonary blood supply with no systemic arterial feeding vessels. Since the mass was presumed to be benign, the patient was followed at an outside institution with serial chest radiographs over the next 2 years.

In September 2003 he became dyspneic, which was documented objectively with a treadmill stress test. CT scan demonstrated the mass had grown to 12.5 cm in diameter and was compressing the bronchi and lung parenchyma (Fig 3). He had no other medical problems. His physical examination and laboratory values were normal, including spirometry. Due to the interval growth and the onset of symptoms, it was decided to resect the lesion via a posterolateral thoracotomy. He was discharged home after an uneventful 4-day hospital stay.

On the basis of the clinical presentation and radiographic images, the most likely diagnosis is:

1. Intralobar pulmonary sequestration
2. Large cell carcinoma of the lung
3. Localized fibrous tumor of the pleura
4. Rounded atelectasis

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Fig 3. — Axial CT image photographed in lung windows demonstrating interval enlargement of the mass. Adjacent vessels and bronchi along the medial margin are displaced by (rather than incorporated into) the mass (arrow).