Pulmonary sequestration diagnosed by multidetector computed tomographic angiography

Sophie P. Toya*, Marousou Douskou, Periklis Tomos, George E. Tzelepis

University of Athens Medical School and Laiko University Hospital, Athens, Greece

Received 4 May 2007; accepted 4 June 2007

Keywords: Lung; Sequestration; Angiography

A 58-year-old man presented with persistent lung mass (Fig. 1). Pulmonary sequestration was diagnosed with multidetector CT angiography (MDCT) (Fig. 2). Advantages of MDCT over conventional angiography include its non-invasive nature, improved resolution and delineation of vasculature, 3D renderings, shorter acquisition time, and less exposure to radiation.

Fig. 1. Computed tomography of the chest demonstrates a left paramediastinal mass with presence of multiple cysts. The mass persisted despite treatment for presumed pneumonia. Bronchoscopy revealed left lower lobe atelectasis and compensatory enlargement of the left upper lobe bronchi. Bronchoscopic lavage specimens and cytology were negative.

Fig. 2. Multidetector CT angiography (64 slices) clearly demonstrates an aberrant arterial branch supplying the sequestered part of the lung (arrows). The artery arises from the anterior wall of the descending thoracic aorta.

* Corresponding author. Address: University of Athens Medical School, Department of Pathophysiology, 75 Mikras Asias Street, 11527 Athens, Greece. Tel.: +30 210 746 2649; fax: +30 210 746 2664. E-mail address: stoya@sbcglobal.net (S.P. Toya).