

Pulmonary Tuberculosis Mimicking Lung Metastasis

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Key Words: Tuberculosis, lung metastasis, chemotherapy, colorectal carcinoma.

(*J Thorac Oncol.* 2008;3: 660–661)

A 72-year-old male had a history of a T3N0 colorectal carcinoma in 2005 and right hepatectomy in 2006 for a single liver metastasis. The patient underwent adjuvant chemotherapy. The CT scan of the chest 6 months after hepatectomy revealed multiple bilateral pulmonary nodular lesions (Figure 1). There was no history of fever, weight loss or productive cough. Tumor markers (CEA, CA 19.9) were negative. Positron emission tomography with 18 F-FDG (FDG-PET) showed that the pulmonary lesions had a high



FIGURE 1. HRCT scan of chest showing a pulmonary nodular lesions in the right upper lobe.

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Disclosure: The authors have no financial disclosures or vested interests for this work.

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ISSN: 1556-0864/08/0306-0660

uptake suggestive of malignancy (Figure 2). There was no evidence of mediastinal or distant lesions. Fiberoptic bronchoscopy was negative.

The patient underwent multiple wedge resections of the right lung. The lung tissue was completely embedded for histologic examination. The biopsy demonstrated numerous well-formed, bronchiolocentric granulomas with large areas of necrosis (Figure 3). With Ziehl-Neelsen stain, a few

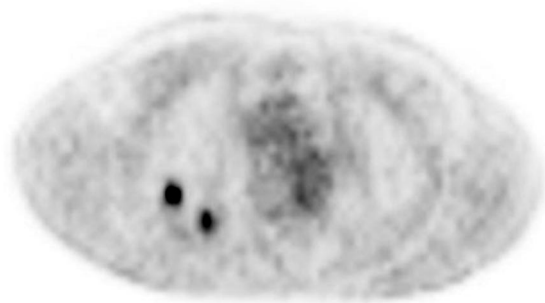


FIGURE 2. PET scan demonstrating high uptake in the pulmonary lesions.

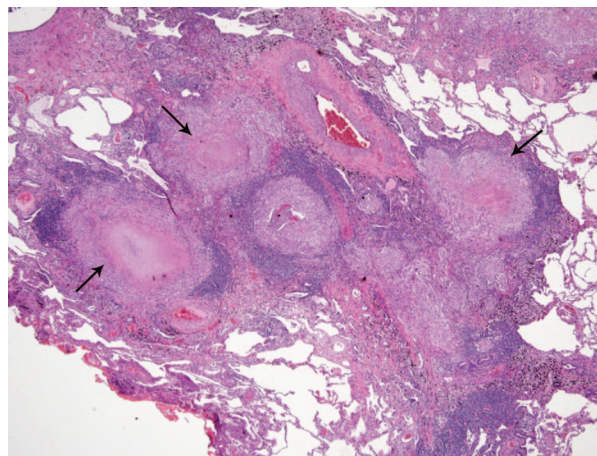


FIGURE 3. Wedge biopsy specimen of the lung at low magnification features several caseating granulomas in the centrilobular region (arrows) (H-E, 20 x).

mycobacteria were detected in the necrotic material. No carcinoma was identified.

The patient was treated with a regimen of isoniazid 300 mg, rifampin 600 mg, ethambutol 1 g, daily for 6 months, combined with pyrazinamide 2 g daily for the first 2 months. A repeat HRCT scan of the chest 6 months after the start of

treatment revealed significant reduction of the bilateral nodules. This case shows that pulmonary tuberculosis can manifest as pulmonary nodules mimicking lung metastasis. Accordingly, nodules of the lung in a patient with a previous neoplasm should be histologically documented to be malignant before starting chemotherapy.