

Images in Infectious Diseases

Pulmonary actinomycosis mimicks lung cancer

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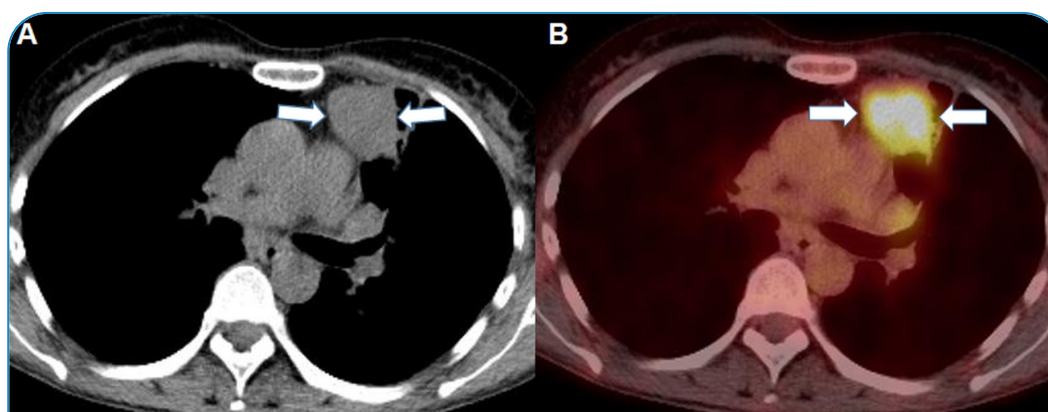


FIGURE 1: F-18 FDG PET/CT scan shows a lesion approximately 53 mm in size (arrow) with irregular borders in the anterior segment of the (A) left lung upper lobe and (B) an increased maximum standardized uptake value of 16.7. F-18 FDG PET/CT, 2-deoxy-2-[fluorine-18] fluoro-D-glucose positron emission tomography/computed tomography.

A 54-year-old woman presented with complaints of cough, fever, sputum, chest pain, and hemoptysis. Lung cancer was considered after viewing the patient's positron emission tomography/computed tomography scan (**Figure 1**). Furthermore, a diagnosis could not be made based on the bronchoscopy and tru-cut biopsy results. Since the patient's complaints of hemoptysis gradually increased, we performed a left upper lobectomy. Pulmonary actinomycosis was diagnosed as a result of the histopathological evaluation.

Pulmonary actinomycosis is a very rare disease that usually occurs in people with poor oral hygiene and can cause serious morbidity and mortality if not treated appropriately. The infection is caused by a form of *Actinomyces*, an anaerobic bacterium with a progressive course. Pulmonary actinomycosis is difficult to diagnose. Clinically and radiologically, pulmonary actinomycosis

can often mimic tuberculosis, lung abscess, or lung cancer^{1,2}, and can sometimes cause life-threatening recurrent hemoptysis³. Pulmonary actinomycosis is a rare condition that should be considered in the differential diagnosis of lung cancer.

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