



Unusual Radiographic Manifestations of Pulmonary Tuberculosis

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Pulmonary tuberculosis is typically suspected on chest radiographs that show cavitary or upper lobe infiltrates. The following are brief descriptions of patients from the San Francisco Chinese community with culture-positive **Mycobacterium tuberculosis** who presented with atypical chest x-rays. Patient one was an elderly female in acute respiratory failure requiring endotracheal intubation and mechanical ventilation. Chest x-rays on each of the first two days were interpreted as congestive heart failure by two radiologists. Tracheal aspirate, however, showed numerous AFB on smear. Patient 2 presented with a right upper lobe collapse on x-ray. Fiberoptic bronchoscopy revealed a friable tumor, suspicious for malignancy, using complete obstruction to the right upper lobe. Biopsies were positive for AFB. Patient 3 was an older man with idiopathic thrombocytopenia, requiring high doses of Prednisone, whose xray showed a 4 cm mass in the right upper lobe. Bronchoscopy showed irregular mucosa causing 50% obstruction to the apical segment of the right upper lobe. Biopsies were nondiagnostic but bronchoalveolar lavage was positive on AFB smear. Patient 4 was a 40 year-old male on prednisone 60 mg (1 mg/kg) a day for treatment of membranous glomerulonephritis when he presented with diffuse interstitial pneumonia. Bronchoalveolar lavage of the right middle lobe showed *pneumocystis carinii*, *nocardia asteroides*, and *cytomegalovirus*. The AFB smear was negative, but cultures later also grew *M. tuberculosis*. Patient 5 was a 55 year-old female with severe dysnea and hypoxia due to near-complete collapse of the entire left lung with only minimal aeration in the left upper lobe. Bronchoscopy showed extrinsic compression of the distal left mainstem bronchus. Bronchial washings were positive on AFB smear. The CT scan then done showed large nodes compressing the left mainstem, confirming tuberculous mediastinitis. In conclusion, because of the high prevalence of tuberculosis in the Chinese community, a high level of suspicion must be maintained at all times, especially in cases where the clinical presentation and chest x-rays are atypical.