Medical Image of the Week: Coccidioidomycosis Pneumothorax

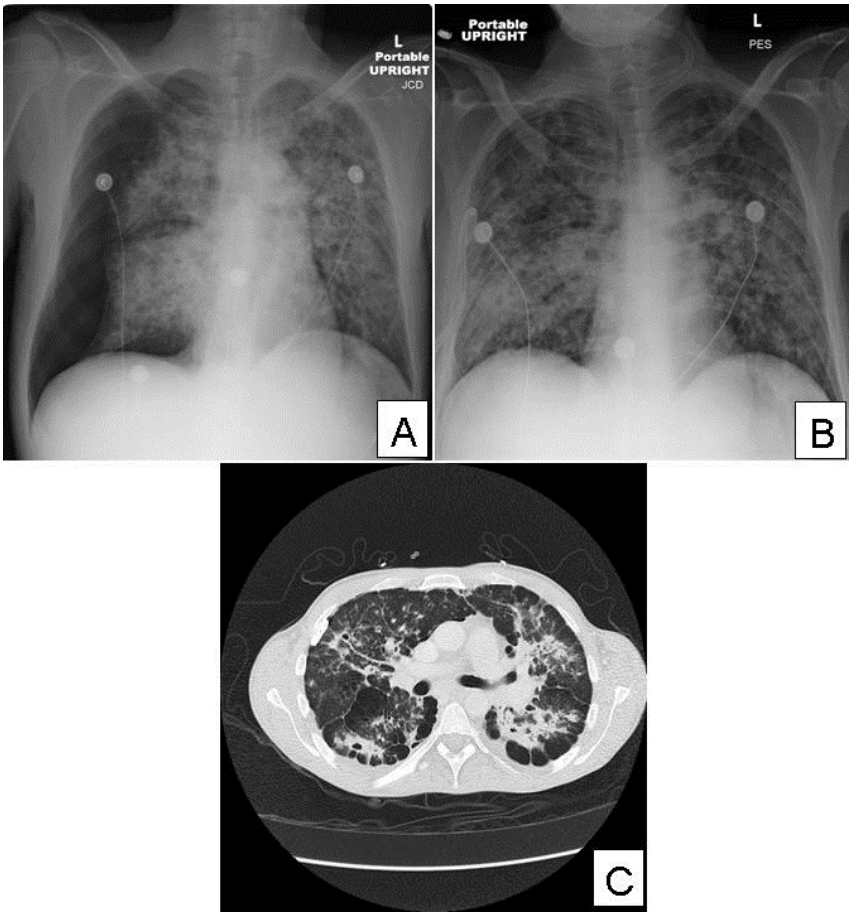

Figure 1. Right-sided pneumothorax (A) with subsequent placement of pigtail catheter and re-expansion of right lung (B). CT shows bilateral multifocal airspace consolidation with nodules and cavitary interstitial disease (C).

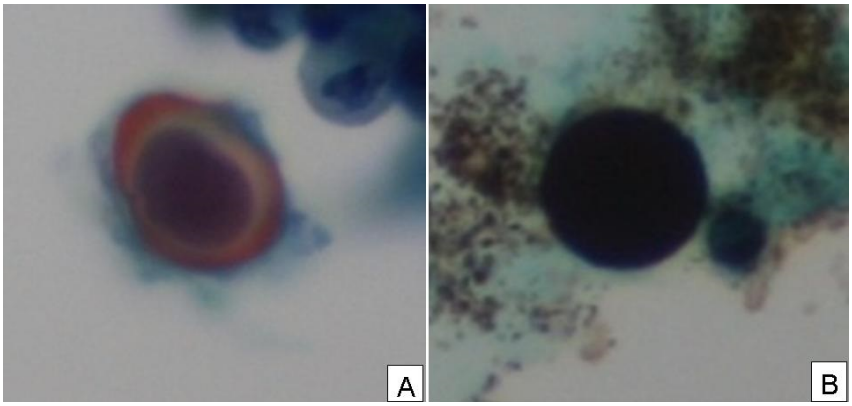

Figure 2. PAP stain (A) and GMS stain (B) demonstrating Coccidioidomycosis from BAL (magnification, 400x).

A 36-year-old man with AIDS and disseminated coccidioidomycosis presented with severe right chest pain, shortness of breath, and a right-sided pneumothorax on CXR. A pigtail catheter was placed with near resolution of the pneumothorax. A bronchoscopy with bronchoalveolar lavage revealed spherules on cytology as well as coccidioidomycosis on culture. No other pathogens were identified. The pigtail catheter was removed three days later with resolution of the pneumothorax.

Rupture of subpleural coccidioidomycosis cavity into the pleural space resulting in pyopneumothorax and/or bronchopleural fistula is rare with reported rates of 1.4 – 2.6% for cavitary lesions (1). Despite antiretroviral therapy and an undetectable viral load, disease was unresponsive to fluconazole. Therapy was subsequently initiated with amphotericin B lipid complex, which resulted in significant improvement of his disease.

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Reference

1. Tiu CT, Cook J, Pineros DF, Rankin LF, Lin YS, Ghitan M, Brichkov I, Shaw JP, Chapnick EK. Pneumothorax in a young man in Brooklyn, New York. Clin Inf Dis. 2011;53(12);1296-7. [CrossRef] [PubMed]