Medical Image of the Week: Intracavitary View of Mycetoma



Figure 1. Thoracic CT scan shows Monod's sign, a mycetoma within an existing cavity, in the left upper lobe.

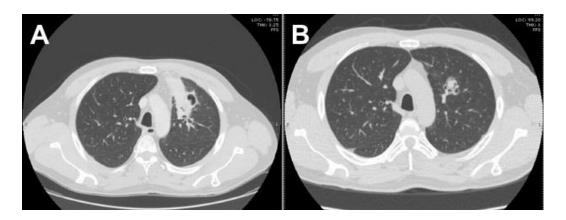


Figure 2. A: Current thoracic CT scan. B: thoracic CT scan 8 months earlier.

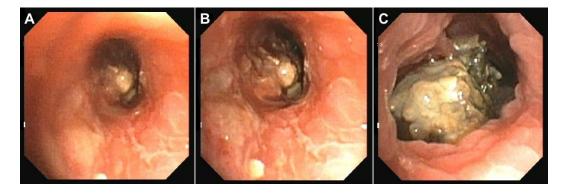


Figure 3. Bronchoscopic views of the cavity with intracavitary mycetoma in the left upper lobe.

A 46-year-old Hispanic man with no medical history presents to the pulmonary service for a second opinion regarding his unresolved pneumonia that initially presented as fever and cough; he did not have hemoptysis. He was found to have left upper lobe cavitary lesion and had been diagnosed with Aspergillus multiple times, with the initial diagnosis one year prior to presentation. He was seen by an outside pulmonologist and was placed on voriconazole 200 mg/day. Since being on the voriconazole he has not been feeling better. He continued to note symptoms of productive cough, fatigue, and weakness. Monod's sign (Figure 1) is appreciated on CT imaging during initial encounter at an outside facility. Comparison of parenchymal damage is seen in Figure 2 comparing CT scans 8 months apart. Patient's fungal cavity was appreciated on bronchoscopic exam (Figure 3). Ultimately, he was evaluated by cardiothoracic surgery and underwent a left upper lobectomy which he tolerated well.

Aspergillomas present as a mycetoma within an existing cavity. Monod's sign is the radiographic finding of a mycetoma within the existing cavity as evidenced in the CT scan. This is not to be confused with the air-crescent sign which is seen more often with invasive aspergillosis, a separate clinical entity. This case is unique given its unique radiographic sign along with the visualization of fungal cavity from within through the bronchoscope.

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References

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- Thompson BH, Stanford W, Galvin JR, Kurihara Y. Varied radiologic appearances of pulmonary aspergillosis. Radiographics. 1995 Nov;15(6):1273-84. [CrossRef] [PubMed]