Medical Image of the Week: Aspergilloma

Figure 1. Axial thoracic computed tomography (CT) image showing emphysematous disease throughout with prominent bullous disease in the upper lobes. Areas of consolidation were concerning for infection. Large cavitation with particulate matter (arrow) was seen in the left upper lobe.

A 69-year-old woman, a current smoker, with very severe chronic obstructive pulmonary disease and prior atypical mycobacterium, was found unresponsive by her family and intubated in the field by emergency medical services for respiratory distress. Her CT thorax showed severe emphysematous disease, apical bullous disease, and a large left upper lobe cavitation with debris (Figure 1). She was treated with broad-spectrum antibiotics and anti-fungal medications. Hemoptysis was never seen. Sputum cultures over a span of two weeks repeatedly showed *Aspergillus fumigatus* and outside medical records confirmed the patient had a known history of stable aspergilloma not requiring therapy.

Aspergillomas usually arises in cavitary areas of the lung damaged by previous infections. The fungus ball is a combination of colonization by *Aspergillus*

hyphae and cellular debris. Individuals with aspergillomas are usually asymptomatic or have mild symptoms (chronic cough) and do not require treatment unless it begins to invade into the cavity wall. When bleeding complications arise, surgical resection is curative but in high-risk patients, embolization may be considered as a stabilizing measure.

Wendy Hsu, MD, Carmen Luraschi-Monjagatta, MD and Gordon Carr, MD
Division of Pulmonary and Critical Care Medicine
University of Arizona
Tucson, AZ

Reference

Kousha M1, Tadi R, Soubani AO. Pulmonary aspergillosis: a clinical review. Eur Respir Rev. 2011;20(121):156-74. [\[CrossRef\]](#) [\[PubMed\]](#)