Medical Image of the Month: Aspergilloma – Monod's Sign



Figure 1 (A) Contrast-enhanced CT of chest showing irregular shape, thick wall cavity with oval heterogeneous soft tissue lesion (black arrow) at the posterior inferior aspect of this cavity. Figure 1 (B) Computed tomography of the chest in the prone position showing the mass moving to dependent region of the cavity (black arrow), known as Monod sign.

A 58-year-old man with a history of human immunodeficiency virus on antiretroviral therapy, bullous emphysematous lung with right upper lobe cavity presented with hemoptysis for three days. On presentation, he was afebrile, with normal oxygen saturation on room air and reduced bilateral breath sounds. Computed tomography (CT) of the chest showed a thick wall cavity at the right upper lobe, with a 3 cm heterogeneous mass at the posterior aspect of the cavity (Figure 1 A). When the patient was placed in the prone position, the soft tissue lesion displaced anteriorly (Figure 1B) showing gravity-dependency (Monod's sign). His serum Aspergillus fumigatus antibodies were also positive. The patient was diagnosed with aspergilloma and started on voriconazole initially. However, because of recurrent hemoptysis, the patient was scheduled to undergo surgical excision. Saprophytic aspergillosis is the causative organism for the development of an aspergilloma (1). It results from colonization of fungus in a preexisting pulmonary cavity which can lead to the formation of a fungus ball within the cavity (1,2). Hemoptysis is the most common presentation. CT scan should be performed in the supine as well as in the prone position to help differentiate from other conditions. In the case of recurrent or life-threatening hemoptysis, surgical excision remains the gold standard option (1).

Kulothungan Gunasekaran MD, Nageshwari Palanisamy MBBS, Sandra Patrucco Reyes MD, Safal Shetty MD Division of Pulmonary Diseases and Critical Care Yale New Haven Health Bridgeport Hospital Bridgeport, CT USA

References

- Sharma S, Dubey S, Kumar N, Sundriyal D. 'Monod' and 'air crescent' sign in aspergilloma. BMJ Case Rep. 2013 Sep 13;2013:bcr2013200936. [CrossRef] [PubMed]
- Grech R. Images in clinical medicine. Aspergilloma. N Engl J Med. 2010 Mar 18;362(11):1030. [CrossRef] [PubMed]