## **Answer to Medical Quiz: Images**

## Answer

- CT scan of chest shows A rounded fungal ball in the left lung that is separated from the wall of the cavity by a crescentic halo of air.
- Diagnosis: Aspergilloma

## Review

An aspergilloma is a fungus ball composed of Aspergillus hyphae, fibrin, mucus, and cellular debris found within a pulmonary cavity <sup>1</sup>. Aspergillomas arise in preexisting pulmonary cavities that have become colonized with Aspergillus spp .

Patients are usually asymptomatic but may present with hemoptysis that may be severe.

Patients with classical pulmonary tuberculosis who are left with cavities of  $\geq 2$  cm have an approximately 20 percent chance of subsequently developing aspergillomas<sup>2</sup>.

The criteria for the diagnosis of aspergilloma are radiologic evidence of a rounded mass in a pulmonary cavity combined with microbiologic evidence of Aspergillus as the causative agent, usually a positive culture from sputum or detectable Aspergillus IgG.<sup>3</sup>

Asymptomatic cases do not require any treatment. If complicated by hemoptysis surgery, local instillation of amphotericin B or bronchial artery embolisation may be considered.

## References

- 1. Judson MA, Stevens DA. The treatment of pulmonary aspergilloma. Curr Opin Investig Drugs 2001; 2:1375.
- Denning DW, Riniotis K, Dobrashian R, Sambatakou H. Chronic cavitary and fibrosing pulmonary and pleural aspergillosis: case series, proposed nomenclature change, and review. Clin Infect Dis 2003; 37 (Suppl 3) :S265.
- Hope WW, Walsh TJ, Denning DW. The invasive and saprophytic syndromes due to Aspergillus spp. Med Mycol 2005; (43 Suppl 1): S207.