

CLINICAL PICTURE

Pulmonary aspergilloma

A 57-year-old lady presented with a 3 days history of fever and dry cough. She has diabetes mellitus and was treated for pulmonary tuberculosis 15 years previously. Clinical examination revealed no abnormal respiratory findings. Blood investigations revealed mildly elevated white cell count and C-reactive protein. However, chest radiograph showed a right upper lobe thin walled cavity with a soft tissue mass (Figure 1a). Computed tomography (CT) scan confirmed the presence of a 4.2-cm thick-walled cavity in the posterior segment of right upper lobe containing a 2.5-cm soft tissue opacity attached to the medial wall of the cavity consistent with pulmonary aspergilloma (Figure 1b and c). Bronchiectasis was also present. The patient was treated for chest infection and referred to the infectious disease team for further management of the aspergilloma.

Pulmonary aspergillosis, infection due to fungus of the *Aspergillus* species (usually *Aspergillus fumigatus*) is categorized into three groups: allergic bronchopulmonary aspergillosis, chronic pulmonary aspergillosis (CPA) and invasive pulmonary aspergillosis. CPA itself is categorized into four categories; chronic cavitary pulmonary aspergillosis (formerly known as complex aspergilloma), chronic fibrosing pulmonary aspergillosis, simple aspergilloma (also referred to as pulmonary aspergilloma or mycetoma) and aspergilloma nodule/s.^{1,2} Of these,

pulmonary aspergilloma is most simple in the spectrum and refers to the development of a fungal ball in a cavity (often tuberculosis in origin especially in endemic regions). The most common presenting symptom is haemoptysis (due to hypervascularization) that can be massive (>100 ml) and life-threatening, although many patients can be asymptomatic.^{1,3} The classic radiographic appearance is a cavity containing a solid, round and often mobile intra-cavity mass. Characteristic CT finding is a halo sign due to a zone of ground-glass attenuation surrounding a pulmonary nodule or mass, and may be the first evidence of pulmonary fungal infection.⁴ Treatment includes prolonged antifungal treatment or surgical resection.^{1,3}

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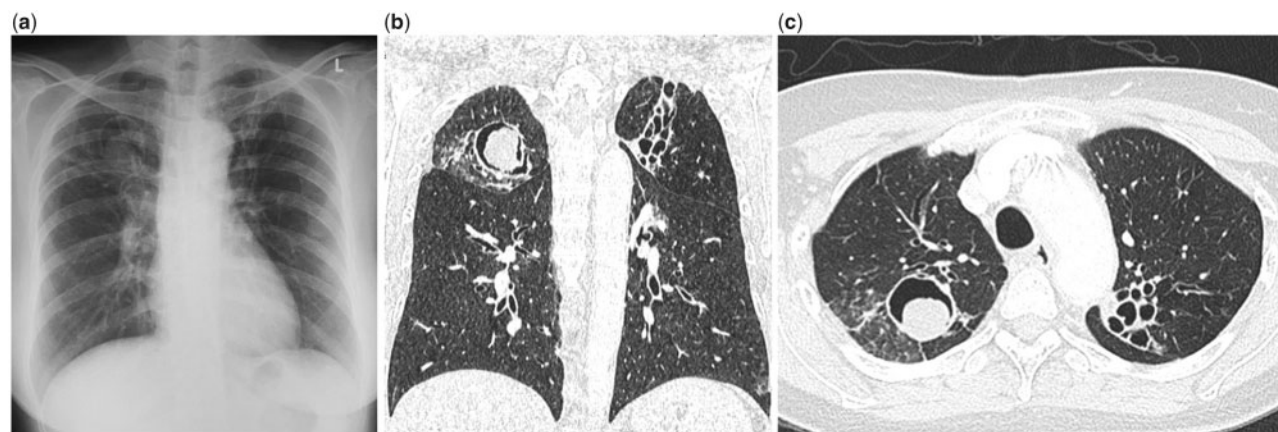


Figure 1. (a) Plain chest radiography showing thin walled cavity with a mass consistent with an aspergilloma in the right upper lobe, (b) and (c) CT scan images showing the cavity with aspergilloma in the right lung and bronchiectasis in the left upper lobe.

Patient consent

Obtained from patient for use of images for publication.

Conflict of interest. None declared.

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