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Multiple fungus balls in a patient with chronic pulmonary aspergillosis

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Keywords
Chronic pulmonary aspergillosis, fungus balls, interstitial lung disease.

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Key message

Typically, radiological examination in chronic pulmonary aspergillosis reveals cavities with fungus balls within the upper lobes. This case showed that multiple fungus balls can also be present in the lower lobes.

Clinical Image

A 76-year-old man visited our hospital because of a continuing low-grade fever. He suffered from interstitial lung disease (ILD) with anti-neutrophil cytoplasmic antibody-associated vasculitis and was taking prednisolone 10 mg daily. Chest X-ray showed bilateral reticular opacities and multiple nodules in the right lung. Chest computed tomography showed bilateral reticular opacities and honeycombing and multiple cavities with fungus balls within the right lower lobe (Fig. 1). Laboratory data showed elevation of his white

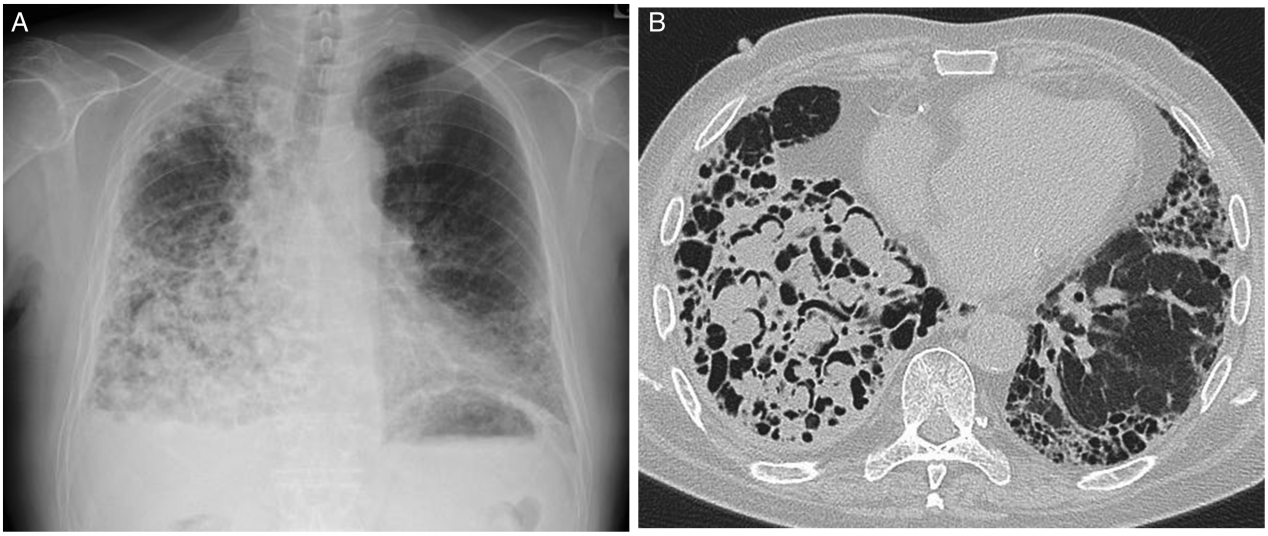

Figure 1. (A) Chest X-ray showed bilateral reticular opacities and multiple nodules in the right lung. (B) Chest computed tomography showed bilateral reticular opacities and honeycombing and multiple cavities with fungus balls within the right lower lobe.

blood cell count (16,490/μL) and levels of C-reactive protein (5.97 mg/dL) and β-D-glucan (37.4 pg/mL). Moreover, serum galactomannan *Aspergillus* antigen and serum *Aspergillus* precipitating antibody were positive, and *Aspergillus fumigatus* was detected in his sputum. We thus diagnosed him as having chronic pulmonary aspergillosis (CPA) and started treatment with orally administered itraconazole. Many cases of CPA are associated with underlying pulmonary diseases, including previous pulmonary tuberculosis, emphysema, ILD, and non-tuberculous mycobacterial infection [1]. As a radiological feature, one or more cavities are usually revealed within the upper lobes, with or without fungus balls [2]. In this atypical but a very educational case, it was thought that fungus balls had formed in the lower lobe because the dominant lesion of ILD was located in the lower lobe.

Disclosure Statement

Appropriate written informed consent was obtained for publication of this case report and accompanying images.

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