Clinical picture

Chronic necrotizing pulmonary aspergillosis

A 66-year-old man, presented with a 3-month history of productive cough associated with poor appetite. He was a non-smoker, with a history of old pulmonary tuberculosis and diabetes mellitus with poor control. Laboratory studies showed a white blood cell count of 12,610/ml with 87.6% neutrophils, and C-reactive protein of 14.19 mg/dl. Computed tomography demonstrated focal cavitation with fluid accumulation and bronchiectasis in the left lower lobe (Figure 1a). Pig-tail drainage was performed and drainage fluid culture grew multiple fungal septate hyphae consistent with aspergillus (Figure 1b). Chronic necrotizing pulmonary aspergillosis (CNPA) was diagnosed based on clinical spectrum.1

CNPA, also called semi-invasive or subacute invasive aspergillosis, usually affects middle-aged and elderly patients with mildly immunocompromised status, such as diabetes mellitus and alcoholism.1 This entity is rare and usually associated with pre-existing structural lung disease such as COPD, previous pulmonary tuberculosis or thoracic surgery.1 Particular risk factors in our case were old cavitary tuberculosis and diabetes mellitus. Antifungal therapy with voriconazole is the primary drug of choice for CNPA.2 In this patient, voriconazole 200 mg was given intravenously twice daily for a period of 4 weeks. Clinical improvement was evident despite no interval change of radiological figure.

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Conflict of interest: None declared.

References

Figure 1. (a) Computed tomography showed focal cavitation with fluid accumulation and bronchiectasis in the left lower lobe. (b) Fluid culture grew multiple fungal septate hyphae in accordance with aspergillus.