

中文題目：肺部麴菌感染病例分享

英文題目：Chronic cavitory pulmonary aspergillosis in middle age man

作者：蔡一民<sup>1</sup>，黃虹綾<sup>1, 2</sup>

服務單位：高雄醫學大學附設中和紀念醫院<sup>1</sup>內科部<sup>1, 2</sup>胸腔內科

## **Introduction**

Chronic pulmonary aspergillosis (CPA) is an infectious disease with high mortality and morbidity rate. The diagnosis depends on the presence of progressive symptoms, radiographic pattern compatible with CPA, mycologic evidence and exclusion of other diseases. However, the diagnosis of CPA is still a big challenge for clinicians due to the insidious clinical course. We herein report the treatment course and prognosis of a CPA case.

## **Case Presentation**

A 60-year-old man, who was a current smoker with 1 pack daily for 30 years, and had career as a fisherman. He didn't have previous underlying disease. He presented as intermittent fever with chills for 2 months before the day of admission. The accompanied symptoms included productive cough with purulent sputum, poor appetite, body weight loss, general malaise, and night sweating. He underwent partial treatment and hospitalization at local hospital for 1 month, but symptoms persisted. After transferring to our hospital, initial survey revealed leukocytosis (153000/uL) with neutrophil predominant (80.3%) and elevated C-reactive protein (48.67 mg/L). Chest radiography showed bilateral alveolar pattern suspect pneumonia with bronchiectasis. He received broad spectrum antibiotics Tazocin for hospital acquired pneumonia initially, while no clinical improvements noted after 1 week. He still suffered from fever on and off and chest x-ray gets more worsening over left upper lobe. Thus, Chest computed tomography (CT) was then arranged, which revealed bilateral bronchiectasis pattern and cavity lesion over left upper lobe. Bronchoscopy exam revealed one polyp over left carina and mucosa swelling over left upper bronchi. Bronchial alveolar lavage (BAL) and polypectomy were performed. Positivity of galactomannan test from BAL (5.53 index, normal < 0.5 index) was noted, and the pathological report of polyp revealed chronic granulomatous inflammatory fungal infection with hyphae. Under impression of CPA, intravenous Voriconazole (200mg twice daily) was applied thereafter and fungal culture of BAL finally showed *Aspergillus fumigatus*. He kept on voriconazole treatment for total course of 7 months, and a serial follow-up clinical manifestations, radiography, inflammation parameters all improved gradually.

## **Discussion**

Chronic cavitory pulmonary aspergillosis usually begins as ill-defined regions of consolidation that progress to form clearly defined cavities. Oral itraconazole and voriconazole are the preferred first-

line therapy. For whom failed therapy either developing triazole resistance or having adverse events, intravenous micafungin, caspofungin, or Amphoterin B even surgery may yield some responses. Treatment should be facilitated at minimum of 6 months' duration and even continued for years if progression.

In our case, the possible etiology might contribute to the fisherman, who may contact with the expired moldy frozen seafood. The clinical manifestations obscured typical bacterial infection, tuberculosis or mycobacterium infection, and even the malignancy. Prompt diagnosis is necessary for proper treatment.