

中文題目：奪命之復發性麴黴菌肺炎

英文題目：Fatally fulminant relapse Aspergillus pneumonia in a very elderly tracheostomy male patient, a case review and thinking

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CASE REPORT –The critical situation of helplessness about management about A 92 year old male came with severe HCAP with old CVA, COPD history and on tracheostomy tube , instantly prescribed broad spectrum antibiotics according to BAL culture drug sensitivity test. He was treated with aggressive measures even lower respiratory hygiene with bronchoscope clearance of much airway copcious secretion but it recurred fever again and breathing distress at times. So he was aggressively investigated with airway microbiology study for work up and treatment. The past history of Aspergillus pneumonia nearly 8 months ago and completed the course of treatment. Now what happened?T he 92-year-old man suffered from tachypnea, hypoxia increased sticky sputum arranged hospitalization. CXR: Right lung pneumonia with white out. He received broad spectrum antibiotics according sputum culture sensitivity results but his condition still deteriorated. We tried every means to rescue him under not violated DNR intention request. The past history of Aspergillus pneumonia 8 months ago completed the course of treatment final rechecking lower respiratory tract just 3 months ago with negative fungal infection result for previous BAL cytology cell block showed : aspergillus clump emerged .Finally he still passed away and contemporary BAL Galatomannan antigen result revealed: strongly positive reaction.What we missed the details?

1. Introduction

Pulmonary aspergillosis is defined to variety of lung diseases caused by the Aspergillus fungus. The most frequent encountered one was A. fumigates. Transmission was made by inhalation of airborne spores which then get deposition in the respiratory tract . Clinical manifestations depended on the virulence of the mold, exposure duration, focus on patient's immune state and co-existence of lung illness. Regarding past medical history, he just completed received over 12 weeks with full dosage of Itraconazole. Upon admission, diagnosis were considered: HCAP on account of CXR displayed whole Right lung opacity. The patient began treatment with broad spectrum antibiotics. Then

bronchoscope was performed, BAL cultures for bacterial were *Pseudomonasa* and *Burkerholderia*. Clinical worsen though adjusted prescription used broad spectrum antibiotics according to BAL culture drug sensitivity test ,steroid and fluid challenge all measures are used .Helpless he still passed way due to statement of DNR. Unexpectedly his BAL about galactomannan antigen result declared: strongly positive on the next day.

Discussion: The invasive pulmonary aspergillus are bronchopneumonia like other pathogen: clinical presentation unresponsive to anti-bacterial antibiotics. It mostly infected immune suppressive and elder victims. The CXR may demonstrated unilateral or bilateral infiltrates with or without pleursy. Though definite diagnosis was made through the illustration of histological invasion by the fungus and the growth of *Aspergillus* in culture. Galactomannan test in BAL was sensitive for *Aspergillus* at least implied probable infection. Once diagnosis is probably established, the antifungal treatment should be started immediately if on other choice for clinical need. Re-infected with *Aspergillus* after complete treatment is rarely mentioned in many guidelines.

Conclusion:

We Can not deny the fact that empirical therapy in HCAP tend to have a blind spot especially for those high-risk groups of chronic organ disorder , malignancy or organ transplant disease and should be notified.

Detection of *Aspergillus* spp biomarker from the respiratory tract in critically ill patients should not be neglected. As for concerning the re-infection rate about fungus just after complete treatment is hard to predict and easily overlooked. Regional prevalence of endemic pathogen, drug susceptibility test and drug resistance need to work together in the multiple fields of medical science .The goal now is to find a better blood or urine biomarker demanded urgency. We learn the lesson that rapid and accurate laboratory inspection about specimen from lower airway in critical pulmonary infection is urgent needed. The mortality rate is rather high in spite of proper treatment. Specifically for those who ever infected with *Aspergillus* in elderly individuals re-infection may be to consider while we should keep in mind.