

中文題目： 在台灣，經驗性給予抗結核藥物在糖尿病控制不良合併上肺葉開洞的病人不一定是對的

英文題目：Empiric Anti-Tuberculosis Treatment Is Not Always the Right Way In Patients Who Had Have Poorly Controlled Diabetes Mellitus and Presented with Pulmonary Cavities Over Upper Lungs in Taiwan

作者：鄭至宏^{1,2}，楊志仁^{1,2,3}

服務單位：¹高雄醫學大學醫學系；²高雄醫學大學附設醫院內科部；³高雄市立大同醫院內科部

Introduction:

Pulmonary tuberculosis is still a popular disease worldwide and Taiwan is an endemic country for tuberculosis. Pulmonary tuberculosis often presents one or more lesions over the upper lobes or the superior segments of lower lobes, and it is always high contagious if the pulmonary lesion presents as cavities. In addition, according to our previous study, Diabetes Mellitus (DM) will influences the immune system and was regarded as the most important risk factor for pulmonary tuberculosis in Taiwan. Since the slow growth characteristics of *Mycobacteria tuberculosis*, in order to avoid diseases spreading, many physicians in Taiwan always prescribed empiric anti-tuberculosis agents to these patients who had such image pictures in DM patients though negative for acid fast bacillus smear. However, this treatment strategy is not always a right way to these patients.

Case report:

70-year-old male, with poor controlled diabetes mellitus and hypertension and smoking history, presented to our chest out-patient department with productive cough and blood tinged sputum for about 2 months in Apr. 2017. The chest radiograph in Apr. 2017 showed two consolidations with cavity lesions over left upper lung. The laboratory examination showed very high HbA1c level (11.2%) with normal liver and renal function. There was no leukocytosis. The high resolution computed tomography (HRCT) of his lung revealed cavity consolidation lesions over the left upper lobe of lung with satellite nodules. Multiple enlarged lymph nodes in the prevascular and paratracheal spaces was also noted. Though presentations of HRCT indicated a high probability of pulmonary tuberculosis, negative for acid fast bacilli (AFB) stain of his sputum. Bronchoscopy also disclosed negative result for smear of AFB and *Mycobacterium tuberculosis* polymerase chain reaction from the bronchoalveolar lavage (BAL). CT guided biopsy was arranged and the pathology report revealed organizing pneumonia. We adjusted our treatment strategy and prescribed oral

prednisolone, his pulmonary cavity lesion had dramatically improved after oral glucocorticoid treatment for one month.

Conclusion:

In tuberculosis endemic countries such in Taiwan, how to prevent the spread of contagious tuberculosis is important and treats as early as possible to these patients who has high probability of pulmonary tuberculosis is urgent.

Accumulated evidences shows pulmonary tuberculosis with cavities always has high contagious characteristic because of high burden of *Mycobacterium tuberculosis*, especially in DM cases. Since the subsequent several specimens from sputum and BAL all showed negative results, other possible etiologies such as organizing pneumonia or cancer should be considered and clarified and therefore pathological proof is mandatory. Misdiagnosis will lead to a wrong treatment and poor outcome. We present this special case and share our experience to physicians in Taiwan.