P-35 A Great Imitator: Miliary Tuberculosis Presented with Septic Shock

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Introduction

Miliary tuberculosis (TB) results from hematogenous dissemination of mycobacterium tuberculosis. The patients infected with miliary TB rarely present with septic shock and is difficult to diagnose. We present a case of miliary TB initially misdiagnosed as septic shock from bacterial pneumonia.

Case presentation

A 77-year-old woman with a history of chronic atrial fibrillation and type 2 diabetes mellitus came to the hospital presenting with appetite loss, fever, dyspnea and general malaise for 4 days. She had never taken immunosuppressant therapy. On physical examination, her temperature was 37.0 degrees Celsius, blood pressure was 80/60 mmHg, heart rate 120 beats per minute and regular, and respiratory rate 26 breathes per minute. Oxygen saturation was 98% on 4L of oxygen per nasal cannula. She had bilateral coarse crackles on lung examination. On laboratory testing, her hemoglobin was 7.4 g/dL, platelet count 49.00 x 109/L, creatinine 3.73 mg/dL, and LDH 1652 U/L. Computed tomography scan showed bilateral pleural effusion with diffuse alveolar infiltration and hepatosplenomegaly. We suspected septic shock due to severe bacterial pneumonia and started intravenous piperacillin-tazobactam, vancomycin and azithromycin. On the next day, however, her respiratory status deteriorated. Despite aggressive treatment, she died 4 days after admission. An autopsy was performed, which showed multiple caseous glanulomas in both lungs, liver, spleen, and bone marrow. Thus, miliary TB was diagnosed.

Discussion

The in-hospital mortality rate of patients with septic shock from tuberculosis is reported to be 79%. Without the results of the autopsy, we were unable to diagnose tuberculosis given her acute clinical course, the lack of a history of TB exposure and her immunocompetent status. In the context of an aging society, the recognition of miliary TB is important for diagnosis, treatment, and prevention of spread of this contagious infection.