

Cytomegalovirus Colitis Following Successful Therapy for Acute Respiratory Distress Syndrome Possibly Caused by Mycobacterium Abscessus in an Aged Woman

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Background/Objective

Cytomegalovirus (CMV) reactivation without evidence of invasive organ diseases is commonly seen in the intensive care unit (ICU) patients. However, CMV diseases may occur following a neglected period of CMV reactivation.

Method

An 83-year-old woman with hypertension had dyspnea and weakness for days. The CXR showed cardiomegaly, patches and reticular interstitial infiltration of both lungs. The laboratory data showed a blood sugar of 199 mg/dL; white blood cell count, 10,600/uL with segment 89.3 %; C-reactive protein, 92.9 mg/L and procalcitonin, 0.58 ng/ml . There was no fever and chills, no chest pain, no digestive symptoms and no dysuria. She was admitted for further management. The initial artery blood gas analysis showed a PaO₂ of 178.3 mmHg, which deteriorated to 59.9 mmHg within 4 days. The CXR became worsening infiltrates of bilateral lung fields, suggesting acute respiratory distress syndrome. She was intubated with ventilator support and was transferred to the ICU. The sputum cultures yielded mixed flora. One sputum culture for tubercle bacillus (TB) yielded Mycobacterium abscessus. Antimicrobial therapy included anti-TB drugs, clarithromycin and intravenous imipenem.

Result

The condition improved 10 days later. CXR showed nearly complete resolution of lung infiltrates. Followed-up sputum cultures yielded *Candida albicans*. The blood *Aspergillus* antigen index was 0.17 (negative). The sputum Herpes simplex-PCR was positive, but negative CMV-PCR. The blood CMV-PCR was positive, but negative CMV antigenemia. Imipenem was used for 3 weeks, but anti-TB drugs and clarithromycin were continued. As difficult weaning ventilator, she was transferred to the respiratory care unit after tracheostomy. Upon the 6th week of hospitalization, bloody stool occurred. Colonoscopy found multiple ulcers over ascending and transverse colon, which biopsies confirmed CMV colitis by positive immunohistochemical staining.

Conclusion

CMV reactivation is commonly seen in ICU patients. Close monitoring and therapy for CMV diseases such as colitis with hematochezia is mandatory.