

Late Onset of Coexistent Cytomegalovirus and Aspergillus Pneumonia Followed by Severe Interstitial Pneumonia Improved by Corticosteroid in a Renal Transplant Patient

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Introduction : We experienced a patient who suffered from CMV and aspergillus pneumonia followed by severe interstitial pneumonia, who improved after the administration of corticosteroid with antiviral and antifungal agents in his ninth post-transplant year.

Case : A 46-year-old renal transplant recipient in his ninth post-transplant year presented with dyspnea and general weakness. Because his blood glucose was 1136 md/dl, insulin therapy was started. Five days after hospitalization, he presented the interstitial pneumonia. Empirical antibiotics and ganciclovir were started, but on the ninth day he was admitted to the ICU for ventilator care. CMV antigens pp65 in blood leukocytes were detected and CMV DNA was detected by polymerase chain reaction. *Aspergillus* species were culture from the sputum, liposomal amphotericin B was started and all immunosuppressive agents except steroid, were stopped. However, his clinical condition did not show a substantial improvement, and thus on day 63, a thoracoscopic lung biopsy was done. A histologic examination revealed the infiltration of inflammatory cells in the edematous interstitium with diffuse temporal homogeneity with minimal fibrosis. Alveolar macrophages aggregated with the pattern of desquamative interstitial pneumonia. Acute angled multiseptated hyphae were observed in terminal bronchiole and many multinucleated giant cells containing degenerated fungal materials were present. With ganciclovir and liposomal amphotericin B, methylprednisolone at 500 mg per day was introduced intravenously for three days and tapered to prednisolone at 35mg per day. His clinical status became much improved. After using total dose of 11 g, the liposomal amphotericin B was stopped and he was discharged on oral itraconazol at 400 mg per day and oral prednisolone at 20 mg per day.

Conclusion : When severe interstitial pneumonia occurs long after transplantation during the administration of minimal immunosuppressants, critical opportunistic pathogens like CMV or Aspergillus should be suspected. And if severe interstitial pneumonia does not improve despite adequate treatment, aggressive diagnostic approach like open-lung biopsy should be constructed.