

신이식을 받은 환자에서 발생한 *Mycobacterium intracellulare*에 의한 폐질환과 요추부 척추염 1예

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신준암, 김수민, 김윤정, 최희정, 장혜련, 이정은, 김대중, 김윤구, 오하영, 허우성

A Case of Lung Disease and Vertebral Osteomyelitis due to *Mycobacterium Intracellulare* in a Renal Transplant Recipient

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Introduction: NTM infections in kidney transplant recipients (KTR) are relatively uncommon. The most common manifestations of NTM infections in KTR are skin/soft tissue disease, followed by disseminated disease. Pulmonary infections are responsible for the most frequent disease caused by NTM, but rare in KTR. We report a case of pulmonary disease and vertebral osteomyelitis due to *M. intracellulare* in a KTR.

Case: A 52 year-old woman who had underwent kidney transplantation in China about 5 years ago before admission. She got a diagnosis of pulmonary disease caused by *M. intracellulare* 10 months ago. The treatment for the pulmonary disease was delayed because of esophageal candidiasis. She has undergone acupuncture regularly because back pain occurred after mountain climbing. Back pain became worse and she felt chills. She was difficult to walk because of sciatica radiating to left leg 3 months ago. She was admitted to our hospital. Her blood pressure was 134/67mmHg, heart rate was 69/minute, respiratory rate was 20/minute and body temperature was 36.3°C. The laboratory findings were white blood cell 3,450/mm³, hemoglobin 10.5 g/dL, platelet 288,000/mm³. The blood chemistry showed total protein 6.7 g/dL, albumin 3.5 g/dL, total bilirubin 0.4 mg/dL, AST 12 U/L, ALT 8 U/L, Na 133 mmol/L, K 5.4 mmol/L, Cl 98 mmol/L, BUN 27.5 mg/dL, Cr 1.21 mg/dL, CRP 6.49. High resolution chest CT showed extensive bronchiectasis and clustered centrilobular nodules with tree-in-bud appearance in both lungs. Contrast enhanced T1-weighted MR image showed bony destruction of vertebral bodies, L4-5 and paravertebral soft tissue change with enhancement. She underwent fluoroscopy guided bone biopsy. There were mild fibrosis of bone marrow and infiltration of plasma cells in the tissue. NTM was identified in the AFB culture (both liquid and solid media). *M. intracellulare* was identified in the NTM PCR-Hybridization method. She started treatment with clarithromycin 750 mg/day, ethambutol 800 mg/day, rifampicin 450 mg/day, moxifloxacin 400 mg/day. The concentration of tacrolimus in the body decreased because of rifampin. We needed to increase the dose of tacrolimus.

Conclusion: Rejection of transplant and drug intoxication can develop because of the reaction between treatment regimen and immunosuppressants. We should frequently measure the concentration of immunosuppressants to adjust the dose of immunosuppressants.

Key Words: 신이식, 비결핵 항산성균, 척추염

Renal transplant, NTM, Vertebral osteomyelitis