

신장이식 환자에서 발생한 출혈성 방광염과 신염을 동반한 파종성 아데노바이러스 감염

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Disseminated Adenovirus Infection including Hemorrhagic Cystitis and Interstitial Nephritis in Kidney Transplant Recipient

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Adenoviruses are common pathogens that have the potential to cause opportunistic infections with significant morbidity and mortality in immunocompromised hosts. The significance of adenoviral infection and disease is incompletely known in the setting of kidney transplantation. Reported adenovirus infections in kidney transplant recipients have typically manifested as hemorrhagic cystitis and tubulointerstitial nephritis, less severe diseases than often seen in other solid organ transplant recipients. We report a case of disseminated adenovirus infection including hemorrhagic cystitis and interstitial nephritis in kidney transplant recipient. A 32-year-old female presented fever, hematuria and dysuria. She had kidney transplantation from deceased donor 10 months ago. She received triple immunosuppressive agents of tacrolimus, mycophenolate mofetil and steroid. Her allograft function was stable with a serum creatinine of less than 1.0 mg/dL. On admission, serum creatinine was 1.5 mg/dL. Urinalysis revealed pyuria and hematuria. Liver enzymes were elevated. CMV and BK virus in blood and urine were negative. We suspected adenoviral infection, so we performed blood and urine real time polymerase chain reaction (PCR) and confirmed adenoviral infection. Even before we got the result, we started Ribavirin 400 mg every 12 hours interval empirically. Stopped MMF and reducing dose of tacrolimus were also done at same time. In spite of ribavirin treatment, fever was not subside and developed dyspnea. Chest X-ray showed pneumonia with pleural effusion. We started IV-immunoglobulin with a total dose of 2 g/kg. On day 13 of hospitalization, her clinical symptoms were improved and no more gross hematuria was noted. Three months after discharge, she had stable renal function and her blood and urine real time PCR for adenovirus are negative. Adenovirus infections in renal transplant recipients have typically manifested as fever, hemorrhagic cystitis. If kidney transplant recipients presents these symptoms, adenoviral infection should be considered.

Key Words: 아데노바이러스, 혈뇨, 신장이식

Adenovirus, Hematuria, Kidney transplantation