

신장이식 후 발생한 BK 바이러스 신염의 임상 경과; 단일기관 연구

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Clinical Outcome of BK Virus associated Nephropathy in Renal Transplant Recipients; Single Center Experience

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Background: BK virus-associated nephropathy (BKVAN) is an important cause of allograft dysfunction in kidney transplant recipients. It has an unfavorable clinical course, and no definite treatment guideline has been established. We report here our center's experience with biopsy-proven BKVAN cases and their clinical course.

Methods: Between January 2004 and April 2013, 25 patients were found with BKVAN, as diagnosed by biopsy at Seoul St. Mary's Hospital. Of the 25 patients, 10 were deceased-donor transplant recipients and the other 15 were living-donor transplant recipients. Three of the patients underwent retransplantation. The primary immunosuppressant used was cyclosporine in 8 patients and tacrolimus in 17 patients.

Result: BKVAN was observed at a mean duration of 22.81±29.11 months after transplantation. The mean serum creatinine level at biopsy was 2.16±0.67 mg/dL. BKVAN occurred with acute rejection in 7 patients (28%). Immunosuppression modification was performed in 21 patients (84%). In addition, leflunomide and intravenous immunoglobulin were administered to 13 (52%) and 2 patients (8%), respectively. Total 5 cases (27.8%) of allograft loss developed for the follow-up periods of 0.7, 17.1, 21.8, 39.8 and 41.5 months from the BKVAN diagnosis. Advanced stage of BKVAN, increased creatinine and accompanied acute rejection at BKVAN diagnosis increased the risk for allograft failure.

Conclusions: In the present cases, the clinical outcomes of the patients with biopsy-proven BKVAN were unfavorable, especially in those with advanced-stage BKVAN, poor renal function, and acute allograft rejection.

Key Words: 신장이식, BK 바이러스, 신염

Kidney transplantation, BK virus, Nephropathy