

HLA-identical 신장이식 환자에서 사구체신염 재발 및 급성 거부반응의 영향

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The Effect of Recurrent Glomerulonephritis and Acute Rejection in HLA-identical Kidney Transplantation

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Background: Although human histocompatibility leukocyte antigen (HLA)-identical kidney transplantation revealed best long-term graft survival, it may not be indefinite. Original disease recurrence and long-term sequelae of acute rejection (AR) may preclude indefinite graft survival. Here, we analyzed the factors that affected the graft survival after HLA-identical kidney transplantation.

Methods: We have studied the effect of recurrent glomerulonephritis (GN) and AR in recipients of HLA-identical renal allograft in Seoul National University Hospital since 1980. A total of 155 HLA-identical grafts were enrolled in this study. To that end, the data of 78 patients with primary GN and 77 patients with non-GN disease were analyzed.

Results: Overall graft survival was 93.6% at 5 years, 86.0% at 10 years, and 60.0% at 20 years, respectively. GN as underlying disease did not affect the graft survival when compared with recipients with non-GN disease (GN vs. non-GN; graft survival was 94.2 vs. 93.2 at 5 years, 83.1% vs. 86.9% at 10 years, 61.8% vs. 59.4% at 20 years respectively, $p=0.647$ by log rank test). Recurrence rate of original GN was 34.6% (27/78 cases for 20 years). But IgA nephropathy (IgAN) had differential outcome as IgAN recurred in 60.0% of recipients. And the recurrence of primary GN significantly affect the graft survival (recurrence vs. non-recurrence; graft survival was 68.5% vs. 89.0% at 10 years, 44.5% vs. 77.9% at 20 years respectively, $p=0.003$). Also, in recipients of HLA-identical renal transplants, graft failure rate was affected significantly by AR (42.9% in rejection group vs. 17.9% in non-rejection group, $p=0.009$). Graft survival was affected significantly by recipient gender (female > male, $p=0.030$), use of mycophenolate mofetil ($p=0.034$), and year of transplantation (after 1995 > before 1995, $p<0.001$). After adjusted by multivariate analysis, original disease recurrence of GN and AR significantly affect the graft survival ($p<0.001$ and $p=0.016$ respectively).

Conclusion: Although recipients of HLA-identical kidney transplantation have a relatively better graft survival, AR and recurrent GN are the main obstacle for indefinite graft survival. Thus, the relevant and appropriate management of recurrence and rejection will contribute to improving the graft outcome in recipients of HLA-identical kidney transplantation.

Key Words: 신장이식, 재발, 거부반응

HLA-identical kidney transplantation, Recurrence, Rejection