

급성 거부반응이 발생한 이식신에서 CD20 양성 군집 세포의 임상적 의미

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The Clinical Impact of CD20 Positive Cluster on Acute Rejection of Renal Allograft

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Background/Aims : It is recently reported that the presence of CD20 positive (CD20+) clusters are possibly associated with severe acute cellular rejection (AR). However, clinical impact of CD20+ clusters on early (EAR) or late onset AR (LAR) remains unclear.

Methods : We examined 72 biopsy-proven acute cellular rejections of 51 renal transplant recipients from January 2000 to August 2008. All of biopsy samples were stained by CD20 monoclonal antibody, and clinical informations were investigated for rejection episodes and progress of allograft. The patients and biopsy samples were classified into EAR (<90 days after transplantation) or LAR (>90 days) with or without CD20 positivity.

Results : The two groups were similar for demographic, clinical and pre-transplant immunologic data. However, incomplete graft recovery ($p < 0.001$) and graft loss by AR ($p = 0.042$) were more frequent in LAR recipients than in EAR. Renal allograft survival rate of LAR was lower than EAR ($p = 0.001$). In EAR recipients, CD20 positivity was associated with resistance to steroid ($p = 0.005$) and incomplete graft recovery ($p < 0.001$). Furthermore, EAR recipients with CD20+ showed higher recurrence rate of AR than EAR with CD20-. In LAR recipients, CD20 positivity were also associated with steroid resistance ($p = 0.014$), incomplete graft recovery ($p = 0.007$) and graft loss by AR ($p = 0.026$). When we compared positivity of CD20 clusters in both groups, it was higher in LAR than in EAR ($p = 0.004$).

Conclusion : CD20 positive clusters were more prevalent in LAR and associated with worse outcome of AR, suggesting one of the causes that worsen prognosis of LAR relatively to EAR.

Key Words : CD20 양성 세포, 급성 거부반응, 후기 거부반응
CD20 positive cluster, Rejection, Late onset acute reject