

한국인의 면역글로불린A신증에서 안지오텐신II 제2형수용체 유전자의 A1818T 유전자 다형성과 신증의 진행과의 연관성

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Association of Angiotensin II Type 2 Receptor Gene A1818T Polymorphism with Progression of Immunoglobulin A Nephropathy in Korean Patients

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Backgrounds : Recent experimental studies have suggested that angiotensin II type 2 receptor (AT2R) might have an protective role in the pathogenesis of IgA nephropathy. Therefore we determined the relationship between the AT2R gene polymorphism and the progression of IgA nephropathy.

Methods : The patients with biopsy- proven IgA nephropathy were recruited through the PREMIER study funded by Korean Society of Nephrology. Genotyping for the A1818T polymorphism of AT2R gene was done using the standard PCR methods and we evaluated the association the A1818T polymorphism with the progression of IgA nephropathy which was defined the increase of serum creatinine more than 50 % compared to the initial one using the Log- rank test and Cox's proportional hazard model.

Results : Among the 462 patients followed up more than 10 months, significantly higher rate of the progression of IgA nephropathy were founded in the patients with A allele group (10.7%: 39 out of 324 patients) than T allele group (4%: 4 out of 99 patients) ($p=.049$), although there were no significant differences in the baseline variables such as initial serum creatinine, proteinuria, blood pressure and the duration of follow up after diagnosis. In the Cox's proportional hazard model, the relative risk to the renal progression in the patients with A allele was 2.84 (CI for Exp(B) : 1.09- 8.66, $p=0.049$) compared to that of T allele adjusted by age, sex, initial creatinine.

Conclusion : A1818T polymorphism of AT2R gene in IgA nephropathy was related to the progression of renal function. A allele might have some protective roles in the progression of IgA nephropathy.

Key Words : 면역글로불린A신증, 유전자다형성, 안지오텐신II제2형수용체
IgA nephropathy, Polymorphism, Angiotensin II type 2 receptor