

급속 진행성 IgA 신증 환자에서 세포독성 면역억제 치료의 효과

중앙대학교 의과대학 내과학교실¹, 성균관대학교 의과대학 삼성서울병원 내과학교실²

신정호¹, 박지현², 장혜련², 이정은², 허우성², 김윤구², 오하영², 김대중²

Outcomes of Cytotoxic Immunosuppressive Therapy in Rapidly Progressive IgA Nephropathy

Jung-ho Shin¹, Ji Hyeon Park², Hye Ryoung Jang², Jung Eun Lee²
Wooseong Huh², Yoon-Goo Kim², Ha Young Oh², Dae Joong Kim²

Department of Internal Medicine¹, Chung-Ang University College of Medicine
Department of Medicine², Sungkyunkwan University School of Medicine Samsung Medical Center

Background: IgA nephropathy (IgAN) is not a totally benign disease and up to 30-40 % of patients progress to end-stage renal disease (ESRD). The rate of progression is diverse and some of patients show rapid decline of renal function, even though there is not crescentic formation. This study examined beneficial effects of cytotoxic immunosuppressive therapy in patients with rapidly progressive IgAN.

Methods: This retrospective observation study included 102 patients with rapidly progressive IgAN after exclusion of those with crescentic formation. Rapid progression was defined when estimated glomerular filtration rate (eGFR) decreased more than 4 ml/min/1.73m² per year. Among them, 31 patients who received cytotoxic immunosuppressive therapy were identified and 55 patients who received conservative management were identified. We evaluated renal survival rate and adverse events according to treatment they received.

Results: The median eGFR and urinary protein to creatinine ratio (uPCR) at baseline were not different between two treatment groups [eGFR 65 (52, 91) vs. 64 (33, 89) ml/min/1.73m², NS, and uPCR 2.2 (1.3, 3.2) vs. 1.7 (0.9, 3.0) g/g, NS]. The median slope was also quite similar between two groups [-7.8 (-10.5, -5.0) vs. -7.5 (-10.7, -5.3) ml/min/1.73m² per year in cytotoxic and control groups, NS]. The cumulative renal survival from baseline was better in cytotoxic group compared to control group (P=0.009). Cytotoxic immunosuppressive therapy was associated lower risk of progression to ESRD, independent of initial eGFR, uPCR and GFR slope (HR 0.13, 95% CI 0.03 to 0.62, P=0.010). In cytotoxic group, the rate of GFR decline was attenuated from -7.8 (-10.5, -5.0) ml/min/1.73m² per year to -3.4 (-5.1, -1.8) ml/min/1.73m² per year after administration of cytotoxic immunosuppressive therapy (p<0.001). The protective effect on renal survival of cytotoxic immunosuppressive therapy was persistent when examined renal survival from the start time of treatment (HR 0.13, 95% CI 0.02 to 0.86, p=0.034). Mortality was not observed and morbidity such as infection requiring hospitalization occurred similarly in both groups (two vs. four events, NS).

Conclusion: Cytotoxic immunosuppressive therapy obtunded the rate of GFR decline and was associated with favorable renal outcome in patients with rapidly progressive IgAN. Large and randomized trial is needed to confirm efficacy and safety of cytotoxic immunosuppressive therapy.

Key Words: IgA신증, 세포독성치료, 신장생존

IgA nephropathy, Cytotoxic therapy, Renal survival