

Propensity Score Matching을 이용한 투석 전 교육 시행군과 비시행군의 생존률 및 이환률 비교

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Effect of Multidisciplinary Pre-dialysis Education in Advanced Chronic Kidney Disease : Propensity Score Matched Cohort Analysis

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Background: The mortality and morbidity of end-stage renal failure patients remains high despite recent advances in pre-dialysis care. Previous studies suggesting a positive effect of pre-dialysis education were limited by unmatched comparisons between the recipients and non-recipients of education.

Methods: We performed a retrospective single center study, enrolling 1,218 consecutive pre-dialysis chronic kidney disease patients, between July 2007 and Feb 2008, and followed them up to 30 months. By using propensity score matching, we matched 149 recipient- and non-recipient pairs from 1,218 patients. The incidences of renal replacement therapy, mortality, cardiovascular event and infection were compared between recipients and non-recipients of multidisciplinary pre-dialysis education (MPE).

Results: Renal replacement therapy was initiated in 62 and 64 patients in the recipients and non-recipients, respectively ($p > 0.05$). The MPE reduced unplanned urgent dialysis (8.7% vs 24.2%, $p < 0.001$), and shortened hospital days (2.16 vs 5.05 days/patient/year). MPE recipients had a better metabolic status at the time of initiating renal replacement therapy. Although no significant survival advantage from MPE was exhibited, MPE recipients had lower incidence of cardiovascular event (adjusted hazard ratio, 0.24; 95% CI, 0.08 to 0.78; $p = 0.017$), and a tendency toward a lower infection rate (adjusted hazard ratio, 0.44; 95% CI, 0.17 to 1.11; $p = 0.083$).

Conclusion: MPE was associated with better clinical outcomes in terms of urgent dialysis, cardiovascular events and infection.

Key Words: 만성신부전, 투석전 교육
Chronic Kidney Disease, Pre-dialysis education