

복막투석 환자에서 icodextrin 투석액이 환자 및 기술적 생존률에 미치는 영향

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Effects of Icodextrin on Mortality and Technique Failure in Patients Undergoing Peritoneal Dialysis

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Background: Many studies have suggested clinical benefits of icodextrin in peritoneal dialysis (PD) patients. However, whether icodextrin may improve patient survival is currently unknown. Therefore, this study aimed to investigate the effects of icodextrin on mortality and technique failure in PD patients.

Methods: Study subjects were 2,163 patients who initiated PD from Jul 2003 to Dec 2006. Outcome data were retrieved retrospectively from the Baxter Korea database. 790 patients were defined as icodextrin group who were maintained on this solution for more than 6 months. We compared all-cause mortality and technique failure between patients with and without icodextrin by using propensity score analysis.

Results: Propensity score matching yielded 776 matched pairs of patients. There were no significant differences in age, gender, diabetes, cardiovascular comorbidity, socioeconomic status, biocompatible solution use, or center experience between the 2 groups. All-cause deaths occurred in 91 (11.7%) patients in icodextrin group compared with 168 (21.6%) in non-icodextrin group (hazard ratio [HR], 0.37; 95% confidence interval [CI], 0.29 to 0.48; $p < 0.001$). In addition, icodextrin use was significantly associated with a reduced risk of technique failure (HR, 0.44; 95% CI, 0.30 to 0.65; $p < 0.001$). Icodextrin group had fewer technique failures due to non-compliance compared with non-icodextrin group whereas peritonitis- or ultrafiltration failure-related technique failure was not different between the 2 groups.

Conclusion: This study suggests that use of icodextrin solution may improve patient and technique survival in PD patients. To confirm these results, a large randomized prospective study is warranted.

Key Words: Icodextrin, 복막투석, 환자 생존률

Icodextrin, Peritoneal Dialysis, Patient survival