

## 혈액투석 환자에서 주 3회와 주 1-2회 투석의 결과 비교

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### Comparison of Outcomes between Incremental and Abrupt Initiation of Hemodialysis: A Propensity-matched Analysis of a Prospective Cohort Study in Korea

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**Background:** When patients are diagnosed as having end-stage renal disease (ESRD) and initiate hemodialysis (HD), thrice-weekly HD is a very common format. Recent report suggested possible benefit from beginning HD therapy less than three times weekly and incremental increase of dialysis dose, but there are not sufficient data about benefits and safety of incremental HD. Here, we compared outcomes of thrice-weekly and incremental HD in incident hemodialysis patients.

**Methods:** A total of 1273 patients who were newly diagnosed as having ESRD and initiated hemodialysis from August 2008 to August 2014 were prospectively enrolled. The patients were classified into the abrupt initiation group (3 sessions per week) or the incremental initiation group (1-2 sessions per week) according to the times of HD per week at the baseline. We compared HRQOL evaluated by KDQOL-SF and Beck's depression inventory (BDI) score at 3 months and 12 months after HD, and residual renal function by daily urine volume at 12 months after HD and all-cause mortality between the groups. The two groups were compared before and after matching with propensity scores.

**Results:** Before propensity score matching, the abrupt group tends to be younger and showed significantly smaller daily urine volume, higher modified Charlson comorbidity index (MCCI), and higher serum blood urea nitrogen and creatinine level compared to incremental group. A total of 432 patients (288 for abrupt and 144 for incremental group) were selected by propensity score matching. After matching, there was no difference in age, sex, daily urine volume, MCCI, and laboratory values between the groups. HRQOL tends to be better in incremental group for every domain of KDQOL-SF and BDI, but none of them showed significant difference at 3 months after HD. At 12 months after HD, only cognitive functioning domain was better in incremental group. Daily urine volume at 12 months after HD was similar in two groups (482.9 cc for abrupt vs. 539.0 cc for incremental group). Moreover, all-cause mortality was comparable between two groups before and after propensity score matching.

**Conclusions:** In this study, incremental initiation of HD showed comparable results with abrupt group regarding HRQOL, residual renal function and all-cause mortality. Incremental HD might be considered as another format of initiating HD for selected ESRD patients.

**Key Words:** 혈액투석, 투석횟수, 삶의 질

Hemodialysis, Times of dialysis per week, Quality of life