

Dialysis Practice Pattern and Outcomes in Korea

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The steady increase in the prevalence and incidence of end-stage renal disease (ESRD) is a worldwide public health problem. Therefore clinical research centers (CRC) for ESRD has performed several studies for dialysis practice patterns and outcomes in Korea. Our study is a prospective, multicenter, observational cohort study of 2,231 ESRD patients from 34 centers in Korea. From 2009 to 2010, we analyzed the type of vascular access in hemodialysis patients, the prescription pattern of vitamin D therapy and quality of life in ESRD patients. AVF was used by 72.5% of incident hemodialysis (HD) patients and 17.4% of prevalent HD patients, and was significantly associated with a lack of cardiovascular disease and arrhythmia ($P=0.001$). The majority of study patients had plasma Ca, P and iPTH concentrations, and $\text{Ca}\times\text{P}$ product greater or less than the range prescribed by K/DOQI. Vitamin D deficiency is frequently observed in ESRD patients, our study showed that vitamin D supplements were more frequently observed in patients receiving peritoneal dialysis ($p=0.004$). The quality of life in ESRD patients was associated with sex, age, education, type of job, type of dialysis, and underlying diseases. From 2010 to 2011, we analyzed the prevalence of co-morbidity, one year survival rate, adequacy in peritoneal dialysis, and the impact of residual renal function (RRF) on mortality. The co-morbidity score was significantly higher in HD compared with PD patients at a baseline. Echocardiographic findings revealed that left ventricular hypertrophy was present in 78.5% of the patients. During follow up, one year patient survival rate was 96.7%, and there was no difference in mortality according to dialysis modality and diabetic status. RRF was preserved in 479 (21.5%) patients. RRF was more preserved in patients with PD compared to those with HD ($P < 0.001$). RRF is associated with decreased mortality in patients with ESRD. The CRC for ESRD study is still ongoing; we are planning to analyze the long-term results for effects of dialysis modality and survival rate in ESRD patients.

Key Words: End stage renal disease, Hemodialysis, Peritoneal dialysis