A Better Choice for Quality of Life: Hemodialysis versus Peritoneal Dialysis

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Abstract

Objectives: Patients on dialysis cannot determine their duration of survival but can choose quality of life by themselves. Therefore, health-related quality of life (HRQOL) is a crucial issue in patients with end-stage renal disease (ESRD) who are facing dialysis modality choice. This study aims to compare HRQOL over time patients initiating hemodialysis (HD) or peritoneal dialysis (PD).

Methods: A total of 989 incident patients starting HD or PD who completed baseline questionnaires were included from a prospective nationwide cohort study. HRQOL was assessed 3, 12, and 24 months after the start of dialysis by the Kidney Disease Quality of Life Short Form 36 (KDQOL-36). The scores of KDQOL-36 were adjusted for age, sex, modified Charlson comorbidity index, educational level, employment status, marital status, hemoglobin, albumin, and total cholesterol levels.

Results: Adjusted 3 months scores of patients on PD showed better HRQOL in 8 ESRD, 3 physical component summary (PCS), and 1 mental component summary (MCS) domains than those of patients on HD. The scores of 3 (effects of kidney disease, burden of kidney disease, and dialysis staff encouragement, all P < 0.05) and 2 (sexual function and dialysis staff encouragement, all P < 0.05) ESRD domains were still significantly higher in patients on PD compared to patients on HD at 1- and 2-years after initiation of dialysis, respectively. At 2-year appointment, both HD and PD patients experienced significant decreases in HRQOL on different domains.

Conclusions: PD has a definite advantage over HD in terms of HRQOL during initial period after dialysis even after adjusting clinical and socioeconomic characteristics, and the effect lasts up to two years after dialysis, even though some declines were found on HRQOL over time. It is important to give detailed information and advice regarding HRQOL to patients considering dialysis modality choice.