

Hemodialysis vs. Peritoneal Dialysis

Outcomes are comparable, but few patients chose peritoneal dialysis.

Patients with end-stage renal disease (ESRD) have better outcomes with kidney transplant than with dialysis. However, about 100,000 ESRD patients start dialysis annually because of limited donor organs or contraindications to transplantation; about 7% start with peritoneal dialysis (PD). In two U.S. studies, researchers address outcomes of and preferences for PD and hemodialysis (HD).

In one study, 685,000 HD and PD patients were assessed in 3-year cohorts from 1996 to 2004; mortality at 5 years of follow-up was evaluated. Compared with HD patients, PD patients were younger, healthier, and more likely to be white. In analyses adjusted for these factors, PD patients had somewhat higher risk for death (about 8% higher) than HD patients between 1996 and 2001, but no difference was noted from 2002 to 2004. The analyses also were adjusted for the greater likelihood that PD patients are selected for transplant. Median survival after dialysis initiation was 36.6 months for PD patients and 38.4 months for HD patients.

In another study, about 1600 ESRD patients were surveyed from 2005 to 2007; nearly 1000 (61%) were counseled about PD, of whom 108 (11%) started PD. Of the 631 patients who did not receive PD counseling, only 10 (1.6%) started PD. Patients who chose PD were younger, healthier, and more likely to be employed. In analyses controlled for demographic and clinical factors, rates of PD use varied substantially across major dialysis centers.

Comment: Outcomes with PD are similar to those with HD, and PD costs about US\$20,000 less annually, yet — strikingly — a substantial proportion of patients do not receive counseling about PD. An editorialist notes that nephrologists report decreasing experience with PD and, therefore, are increasingly uncomfortable counseling patients about it, which leads to a downward spiral of counseling and use. A new Medicare benefit that provides for six sessions of counseling about dialysis options could help reverse this trend.

— [Thomas L. Schwenk, MD](#)

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