Many Living-Donor Kidney Recipients Start Dialysis before Transplant

One-third of living-donor kidney transplant recipients are started on dialysis before transplantation—even while their donor’s evaluation is proceeding, reports a study in *Transplantation*.

The retrospective study included 478 patients who ultimately received a living-donor kidney transplant, and who were not on dialysis when their donor was being evaluated for at least 3 months. The transplants were performed at five centers in Ontario between 2004 and 2014. The proportion of patients initiating dialysis before transplantation was analyzed, along with factors associated with this outcome.

Thirty-five percent of patients initiated dialysis a median of 9.7 months after their donor started evaluation. Median time on dialysis before transplantation was 8.8 months. The costs of dialysis in this group were $81.1 million (in Canadian dollars). Twenty-six percent of patients initiated dialysis urgently in the hospital.

Median time from the start of donor evaluation to transplant was 22.4 months for patients who started dialysis before transplantation, compared to 10.6 months for pre-emptive transplant recipients. Initiating dialysis before transplantation was more common when the donor was female, non-white, lived in a lower-income neighborhood, and had later referral to the transplant center. Rates of potential unrealized pre-emptive transplants varied between centers.

Pre-emptive kidney transplantation avoids the risks of initiating dialysis and leads to better patient experiences and outcomes. However, even after a living donor is identified, there are many challenges to pre-emptive transplantation, including a lengthy donor evaluation process.

In this series from Ontario, 35% of eventual living-donor kidney recipients initiated dialysis before transplantation, even though their donor’s evaluation was well underway. Future studies should consider whether some of these events can be prevented by addressing inappropriate delays to improve patient outcomes and reduce healthcare costs,” the investigators conclude [Habbous S, et al. Initiating maintenance dialysis prior to living kidney donor transplantation when a donor candidate evaluation is well underway. *Transplantation* 2018; DOI: 10.1097/TP.0000000000002159].

Glycated Albumin Predicts Mortality in Dialysis Patients with Diabetes

In diabetic patients on hemodialysis, glycated albumin (GA) might provide a valuable alternative for predicting mortality, according to a study in *Nephrology Dialysis Transplantation*.

The study included a cohort of 84,282 diabetic patients on maintenance hemodialysis in Japan, identified from the Japanese Society for Dialysis Therapy Renal Data Registry. Mean age was 67 years and mean time on dialysis 6.4 years; about 70% of patients were male. Measurements of both GA and glycated hemoglobin (HbA1c) were available for 22,441 patients. One-year follow-up data were used to assess the two measures as predictors of mortality, with adjustment for potential confounders.

Overall 1-year mortality was 8.4%. Mortality was lowest for patients with a GA level between 15.6% and 18.2% (1st to 3rd decile) and those with HbA1c of 5.8% to 6.3%. The associations with GA were independent of serum albumin level or cardiovascular disease history. Glycated albumin had a linear or J-shaped association with mortality, while HbA1c had a U-shaped curve. Adjusted hazard ratios for mortality were significantly higher at GA levels less than 12.5% and 22.9% or above. The trends were flatter in older patients, those with higher hemoglobin, and those with a history of cardiovascular disease. There was evidence that models incorporating GA might have better predictive value than adding HbA1c.

Glycated hemoglobin may be limited as a predictor of mortality in patients with diabetes on hemodialysis. Glycated albumin—reflecting glycemic control over approximately the previous 2 weeks—has been proposed as a glycemic marker in dialysis patients.

This study shows a linear or J-shaped association between GA and 1-year mortality, in a large group of diabetic hemodialysis patients in Japan. While emphasizing the need for further research, the investigators conclude, “[O]ur analyses suggest the potential superiority of GA over HbA1c in predicting mortality.” They also discuss the implications for understanding the phenomenon of “burnt-out diabetes” [Hoshino J, et al. Glycated albumin versus hemoglobin A1c and mortality in diabetic hemodialysis patients: a cohort study. *Nephrol Dial Transplant* 2018; DOI: 10.1093/ndt/gfy014].

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CMS announces plans

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algorithms prevent patients from getting their data. Under some CMS programs, hospitals and clinicians must show they have not engaged in information blocking activities. The administrator also highlighted other CMS plans to empower patients with data:

- CMS is requiring providers to update their systems to ensure data sharing.
- CMS intends to require that a patient’s data follow them after they are discharged from the hospital.
- CMS is working to streamline documentation and billing requirements for providers to allow doctors to spend more time with their patients.
- CMS is working to reduce the incidence of unnecessary and duplicative testing that occurs as a result of providers not sharing data.

As these reforms progress, the American Society of Nephrology will provide input to CMS and report back here on CMS’ progress.