

When to Start Dialysis

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Q I sent a patient with a glomerular filtration rate (GFR) of 15 mL/min to nephrology to start dialysis. He came back to me and said they don't start dialysis at 15. When do you start? Why?

There is considerable variation in the timing of dialysis initiation. Research suggests that sometimes earlier is not better.

IDEAL, a randomized controlled trial conducted in Australia and New Zealand, evaluated the advantages and disadvantages of earlier versus later dialysis initiation.¹ Patients were randomly assigned to start any type of dialysis when their GFR was 8 or 11 mL/min. The results indicated that starting dialysis in a patient with a higher GFR *did not* lower the mortality or morbidity rate but *did* increase costs and complications (mostly for vascular access).¹

Based on these findings, most of us start dialysis in a patient who has a GFR < 10 mL/min *and* symptoms of kidney failure. These include a metallic taste in mouth, weight gain (usually due to edema) or loss (cachexia), feeling “poorly,” hard-to-control hypertension, shortness of breath, confusion (uremic brain), odor, skin color changes, and insomnia. Symptomatic patients can be started on dialysis at a higher GFR (usually ≤ 18 mL/min), but there are many hoops to jump through with Medicare.

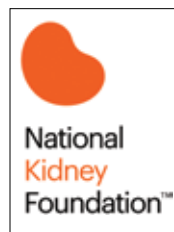
However, IDEAL was conducted outside the United States and included very few elderly (age > 75) patients with chronic kidney disease. In 2018, Kurella and colleagues published a study that analyzed age and kidney function in a US veteran population.² Their results showed that age should be included in the “when to start dialysis” calculation. For older veterans, starting dialysis earlier—at a GFR of 10 mL/min—increased survival. However, the researchers pointed out that in this age group, survival is in months (not years) and does not necessarily equate to quality of life.

In conclusion, there is no compelling evidence that initiation of dialysis based solely on measurement of

kidney function leads to improvement in clinical outcomes. In otherwise asymptomatic patients, there is no reason to begin dialysis based solely on GFR; age and fragility need to be considered in the equation. Earlier is not always better, and for the elderly patient with multiple comorbidities, dialysis is not always a better choice. —**TH** **CR**

REFERENCES

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2. Kurella Tamura M, Desai M, Kappahn KI, et al. Dialysis versus medical management at different ages and levels of kidney function in veterans with advanced CKD. *J Am Soc Nephrol*. 2018;29(8):2169-2177.



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