

## When Can You Stop Dialysis?

Marlene Shaw-Gallagher, PA-C

**Q**When my patient was told that she needed dialysis, one of her first questions was, “For how long?” Which got me thinking: How often do dialysis patients regain kidney function? Are some more likely than others to be able to stop dialysis?

Diagnosis with end-stage renal disease (ESRD), which requires dialysis, is a life-changing event. Inevitably, patients ask about their chance of recovery and the likelihood of stopping dialysis. Studies have consistently demonstrated low rates of kidney recovery, ranging from 0.9% to 2.4%.<sup>1</sup>

According to the United States Renal Data System (USRDS), from 1995-2006 only 0.9% of ESRD patients regained kidney function resulting in the discontinuation of dialysis.<sup>2</sup> In one study, Agraharkar and colleagues reviewed the medical records and lab results of patients discharged from a chronic dialysis unit and reported a 1% to 2% rate of kidney recovery. The researchers concluded that closer monitoring of residual kidney function was key to identification of patients with a greater chance of recovery.<sup>3</sup> Chu and Folkert noted a recovery rate of 1.0% to 2.4% in a review of large observational studies, concluding that the underlying etiology of the kidney failure was the single most important predictor.<sup>4</sup>

Another study of approximately 194,000 patients who started dialysis between 2008-2009 demonstrated much higher rates of sustained recovery: up to 5%. This study showed that patients with kidney failure associated with acute kidney injury (AKI) were more likely to achieve recovery; patients with the AKI diagnosis of acute tubular necrosis had the highest rate of recovery.<sup>1</sup>

Similar studies of pediatric patients are rare. One European study followed 6,574 children who started dialysis before age 15. Within 2 years of dialysis initiation, just 2% showed kidney function recovery. This study also identified underlying etiology as an important predictor of recovery; ischemic kidney failure, hemolytic uremic syndrome, and vasculitis were associated with the greatest chance of recovery.<sup>5</sup>

**Marlene Shaw-Gallagher** practices in the Nephrology Division of Michigan Medicine and is an Assistant Professor at University of Detroit Mercy.

Despite these recent findings, the prospect of discontinuation of dialysis with a diagnosis of ESRD remains very low. A patient’s underlying etiology influences the possibility of recovery; those with AKI tend to have the greatest chance, making close monitoring of residual kidney function essential in this population.<sup>3</sup> —MSG **CR**

### REFERENCES

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