SIGNIFICANCE STATEMENT

Most patients on hemodialysis are treated thrice weekly even if they have residual kidney function. One reason is uncertainty as to how much dialysis should be prescribed in patients with residual function. Recent guidelines, however, assign increased weight to residual function, allowing shorter treatment times when it is present. Residual function has been assigned to increased weight because it operates continuously, and the residual native kidney performs functions that are not replicated by hemodialysis, including removal of solutes by secretion. This study demonstrated that plasma concentrations of secreted solutes in patients with residual function treated twice weekly are as well controlled as in anuric patients treated thrice weekly. These results motivate further study of the incorporation of residual function in dialysis prescriptions.