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Authors

Obi, Yoshitsugu
Streja, Elani
Ravel, Vanessa
[et al.](#)

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INTERDIALYTIC WEIGHT GAIN MODIFIES THE ASSOCIATION OF HEMODIALYSIS FREQUENCY WITH DECLINE IN RESIDUAL KIDNEY FUNCTION IN INCIDENT DIALYSIS PATIENTS.

Yoshitsugu Obi¹; Elani Streja¹; Vanessa Ravel¹; Connie M. Rhee¹; Csaba P. Kovesdy²; Steven M. Brunelli³; Rajnish Mehrotra⁴; Kamyar Kalantar-Zadeh¹.
¹Harold Simmons Center, UC Irvine, Orange, CA; ²Nephrology, Univ. Tennessee, Memphis, TN; ³DaVita Clin Res., Denver, CO; ⁴Nephrology, Univ. Washington, Seattle, WA.

Patients transitioning to hemodialysis (HD) typically undergo thrice-weekly HD irrespective of residual kidney function (RKF), and this frequent exposure to HD may contribute to more rapid RKF decline. Meanwhile, interdialytic weight gain (IDWG), a risk factor for the RKF loss, is greater among patients undergoing less frequent HD. Among patients who started in-center HD during 2007-2011 in a large dialysis organization, those who survived to the 4th quarter (12 months) with ≥ 2 measurements of $\text{Krt}/V_{\text{renal}}$ were included. We identified 816 patients who underwent an incremental HD regimen (i.e., initiated upon twice-weekly HD) and 31,553 patients with a conventional thrice-weekly HD regimen. The incremental regimen was associated with older age, Caucasian race, higher $\text{Krt}/V_{\text{renal}}$, and lower prevalence of congestive heart failure. We then

employed 1:4 stratified nearest-neighbors matching with replacement based on these factors at the 2nd quarter. In this matched cohort including 713 patients on the incremental regimen, patients who underwent the incremental regimen

experienced a slower decline in $\text{Krt}/V_{\text{renal}}$ compared with the conventional regimen ($P < 0.01$). Furthermore, this association was more pronounced in patients with less weekly %IDWG (Wald P value = 0.046). Hence, an incremental HD regimen is associated with greater preservation RKF, particularly in patients with minor IDWG. These data suggest a clinical trial; but can't yet recommend change in clinical practice.

