Routine Is the Worst Enemy of the Dialysis Patient

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Dear Editor,

We read with great interest the review by Chazot and Jean [1] on incremental hemodialysis (HD). We fully agree that it requires a very high level of commitment from the nephrologist, the dialysis unit staff, and the patient. However, we strongly disagree when the authors state that “the safety and benefits of thrice-weekly HD therapy in incident patients outweigh the potential advantages of incremental dialysis” [1].

Actually, the majority of HD patients initiate dialysis with a relatively intense thrice-weekly HD (3HD/week) regimen of 3–4 h per session, with little individualization of prescription based on residual kidney function (RKF) or other patient factors [2]. Although the regulatory agencies might consider this HD regimen as “standard of care” and “adequate requirement,” it is by no means perfect. The 3HD/week regimen has been assumed, until recently, almost as a dogma in the dialysis community [3]. Incredibly, the 3HD/wk schedule has been widely accepted worldwide without ever undergoing any randomized controlled trial (RCT) to examine whether less frequent HD treatments would be inadequate or harmful [4].

The optimal regimen for incident patients is not known. It is plausible that the routine practice of fixed-dose 3HD/week

in incident patients with substantial RKF may be harmful, contributing to an accelerated loss of RKF [5, 6]. Incremental HD is based on the simple idea of adjusting its dose according to the metrics of RKF. Indeed, most patients initiating dialysis have some degree of RKF, often residual renal urea clearance (Kru) >3 mL/min and urine output >500 mL/day. Given the importance of RKF preservation in conservative therapy, it seems a contradiction to ignore the contribution of RKF in incident HD patients. What is important to note is that the challenge of preserving RKF or urine output in HD patients has never been taken seriously. The Kidney Disease Outcomes Quality Initiative suggests that minimum targets of adequacy of the dialysis dose (Kt/V) may be reduced in those with Kru ≥2 mL/min/1.73 m² [7]. The European Best Practice Guidelines recommend measuring RKF in HD patients using the mean of urea and creatinine clearances and offer suggestions to incorporate this into the HD prescription to allow individual adjustments of dialysis prescription to meet minimum dialysis adequacy targets [8]. However, these guidelines do not recommend an incremental transition from less to more frequent HD over time, while, ironically, according to most peritoneal dialysis (PD) guidelines, PD dose should be adjusted up-

ward parallel to decline in RKF, the preservation of which is a high priority target in PD [4, 9].

Finally, we agree with the statement “routine is the worst enemy of the dialysis patient” made by Chazot and Jean [1]. This is the reason why the scientific nephrological community should strive to design and perform full-fledged RCTs testing incremental HD [10]. Such studies should be designed in order to include also the once-weekly HD treatment combined with low-protein diet [11] and without low-protein diet [10] in the intervention arm of a potential RCT testing incremental HD. If the potential benefits of incremental HD will be confirmed, then starting dialysis at a full dose will be subjecting patients to unnecessarily long or more frequent treatments at higher cost.

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