Intensive home hemodialysis: the best treatment in the best system

Sir,

With great interest, we read the recently published editorial comment by Dr Piccoli entitled ‘The never-ending search for the perfect dialysis. Should we move from the best treatment to the best system?’ [1].

We are convinced that intensive haemodialysis (HD) may be the best dialysis treatment in the best system. Not only in specific circumstances such as pregnancy, after non-renal solid organ transplantation or in elderly may intensive home HD be strongly indicated [2, 3], but there should be an ‘intensive HD first’ strategy at the time of education of the predialysis patient [4]. Home HD promotes autonomy and independence and may therefore further increase quality of life (QoL) in addition to the multiple benefits of optimized uraemic toxin clearance and volume control secondary to intensive HD as compared to other dialysis strategies [2].

Piccoli mentions two potential clinical concerns for intensive HD. The first refers to the increased risk of vascular access problems in the context of more frequent cannulation in intensive HD. The recent FHN trial did indeed reveal an increased need for vascular access procedures in the short daily hemodialysis (SDHD) group as compared to the conventional HD group [5]. However, the reason for this observation remains unclear as it may well have been that it was purely due to more frequent visits to the HD unit with more frequent vascular access control. The second potential clinical problem mentioned by Piccoli is the depletion of small molecules and trace elements and an increased risk of inflammation. However, excellent phosphate control, improvement of malnutrition and suppression of inflammation are well-studied advantages of intensive HD and we therefore do not consider the abovementioned as a potential clinical problem for intensive HD [2].

We support the idea, suggested by Piccoli, of interchangeability between different dialysis regimes as long as the patient follows one of the intensive HD regimes, whether it is SDHD, alternate night nocturnal HD or nightly nocturnal HD. Indeed, previous studies have shown that QoL is higher if patients are provided with the choice of the dialysis modality and it is therefore possible that providing home HD patients with the autonomy of alternating between different intensive HD modalities may further increase QoL.

Finally, it is indeed time now for the governments and for health care insurance companies to obtain the insight that end-stage renal disease (ESRD) patients should be treated with the best treatment in the best system by changing the reimbursement system. This may enable these patients to have the highest QoL and physical activity and thereby also the best social functioning and economic productivity. This may further reduce the financial burden of the treatment of ESRD patients.

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5. The FHN Trial Group. In-center hemodialysis six times per week versus three times per week. N Engl J Med 2010; 363: 2287–2300

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