Reviewer's report

Title: Online-Haemodiafiltration vs. conventional haemodialysis: a cross-over study.

Version: 2 Date: 17 October 2014

Reviewer: ercan ok

Reviewer's report:

This well-designed crossover study compared several clinical and laboratory parameters in hemodiafiltration and high-flux hemodialysis.

Minor essential revisions:
1. Please indicate treatment method as postdilution HDF in the method part of Abstract. Please correct “predilution HDF” written mistakenly in Conclusion (page 9) as “postdilution HDF”.
2. Please check if the reference given for ESA dose in page 4 (line 25).
3. It would be better to give data regarding blood flow rate, dialysate flow rate and convection volumes for each of three periods, in the Table-1.
4. The authors reported that lower albumin levels were associated with the presence of diabetes and lower convection volumes in HDF periods. The authors mention much more prominent decrease of serum albumin by HDF in diabetic patients and speculate that albumin loss by HDF is higher in diabetics. We do not know whether decrease of serum albumin after switch to HDF is different in diabetics and non-diabetics (no data on this). It would be interesting to see levels of albumin and also beta-2 microglobulin in three periods in diabetic and nondiabetic patients separately. Would authors like to discuss another possibility that diabetic patients may have lower serum albumin levels in general compared to non-diabetics without regarding HD or HDF treatment (as a result of more prominent overhydration, inflammation, malnutrition) and high convection volume can not be achieved in those patients due to low serum albumin?
5. Discussion is quite long, is it possible to shorten by removing parts not directly related to results of the current study (for example discussion of survival)?

Discretionary revisions:
1. I would suggest to remove the numbers given for proportion of patients on alfacalcidol, Ca-based PO4-binder, sevelamer, cinacalcet, anti-hypertensives in the results part of the Abstract and to give three numbers (instead of two which may cause confusion in readers) showing proportion of patients on those medications in three periods of the study in the Results section (page 5)
2. I would suggest to remove Figure 5 and also relevant part in Results section because I believe that lower convection volume might be the result of having low serum albumin level.
Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
- I have received the salary as a consultant from Fresenius Medical Care Turkey; I do not have financial and nonfinancial interest in relation to this paper.
- I do not have any stocks
- I do not hold and not apply for patent.