Reviewer's report

Title: Acetate free citrate-containing dialysate increase intact-PTH and BAP levels in the patients with low intact-PTH.

Version: 1 Date: 2 June 2012

Reviewer: Jakob Gubensek

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Authors compared the effect of acetate-containing and citrate-containing dialysate on metabolic acidosis, calcium and iPTH levels in a single session and in a 4-month cross-over study. They found better correction of acidosis and stable iPTH in single-session study, while there was an increase in iPTH in the low-iPTH group over the longer period, with stable calcium levels.

Major compulsory revisions:
1. Results, single-session study, metabolic acidosis: to claim that "the increase of pH and HCO3 with A(-)D ... were *significantly* larger than A(+)D ..." one should compare the increases in HCO3 and pH between both groups and give a p value.

Minor essential revisions:
1. It is not customary to explain results in figure legends, this should be omitted.
2. In Table 2, for the cross-over study: there were 29 pts (and not 19)

Discretionary revisions:
1. Introduction, end of 1st paragraph: "... Lefebvre A et al. reported that optimal correlation of metabolic acidosis ..." should go: "... optimal correction ...
2. Methods, study design, cross-over study: "The conditional background for HD therapy, ...", should be changed to something like: "Other parameters of HD therapy, ...
3. In Figure 3, graph 2, title should probably be "Patients with HCO3 > 20 mEq/L"
4. Legend of Table 1: " on the other hand, instead ..." only one of the phrases is necessary
5. Reference No.2 (in press, 2011) can probably be replaced with a full reference by now.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published
**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.